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VIRGINIA BUSINESS REPORT

BUREAU OF BUSINESS RESEARCH, SCHOOL OF BUSINESS ADMINISTRATION
THE COLLEGE OF WILLIAM AND MARY, WILLIAMSBURG, VIRGINIA

Report No. 337 October, 1988

Business in Virginia September, 1988

Two strong moves, one positive and one negative, dominated the September economic scene. Building permits across the Commonwealth soared, up 56.8 percent for our sample of seventeen urban areas. This gain stems mainly from a spectacular increase in Richmond. However, eleven of the seventeen areas experienced higher dollar amounts of permits than in September 1987; the rebound in building plans was not confined to only a few areas. Rising interest rates and slowing demand for structures, both houses and nonresidential, have not yet deterred most of Virginia's builders. Such huge monthly jumps in permits are rare, though, and will be rarer still in the coming months as Virginia's general economic growth follows a more moderate course.

The other strong September move was the 12.0 percent decline in new car registrations. The demand for new automobiles slumped significantly this summer. We now have had four consecutive months of sales below those a year ago. The cumulative result is new car registrations for the first three quarters of 1988 are just even with 1987 sales for the same period, and well below the peak level in 1986.

None of the variables reported in Table II other than Building Permits and New Car Registrations changed by more than 4 percent from year-ago levels. Electricity and water consumption rose 3.8 percent and 1.2 percent respectively. On the other hand, newspaper advertising linage declined 1.9 percent, and bank debits edged down 0.4 percent. Our sample of retail stores reported 1.4 percent lower sales per store, demonstrating again that the number of retail suppliers has outgrown consumer demand in some parts of Virginia. Total retail sales in nearly all areas undoubtedly rose last month, as will be confirmed next month by the taxable sales reports. But the story is quite different for individual merchants; many types in many areas of the state are experiencing lower volumes per establishment than at this time last year. That situation suggests retailers may offer more sales early in the Christmas season with more substantial discounts than usual.

The two lagged indicators, retail sales as reported by the Virginia Department of Taxation and nonagricultural employment, posted substantial increases in August. Total taxable sales rose 15.2 percent, showing total consumer demand in Virginia indeed is rising. Job growth of 4.1 percent also is a very favorable sign—new jobs are being created at an impressive rate in Virginia.

With three quarters of the year behind us, it is appropriate to review the state's 1988 economic performance. Building permits during the first three quarters have

Chart I

Nine Selected Business & Economic Indicators Percentage Change

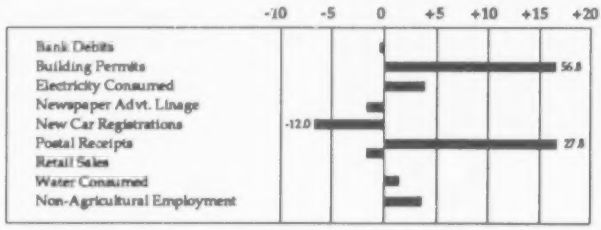
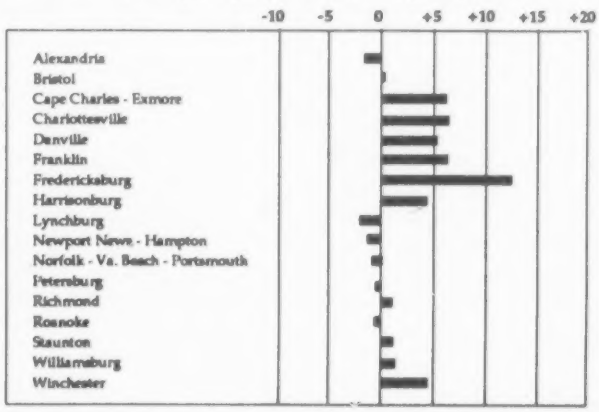


Chart II

City Indices



exceeded comparable 1987 levels by 13.0 percent, sustaining the construction boom in Virginia and pushing construction jobs to all-time records. Payroll job growth has been a strong 4.2 percent (through August), about one-half percentage point below last year's gain— only a slight slowdown. Overall economic activity has shown good growth, gently decelerating. We definitely will finish 1988 in good economic health. RLP

Directing the Nonprofit Corporation

Herrington J. Bryce
Commonwealth Professor
of
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College of William and Mary

A recent article by Peter Drucker in the Wall Street Journal noted that it has become almost a dictum that any executive who wishes to move up the corporate ladder must render service to a nonprofit or charitable organization—presumably on the board of directors. He also correctly noted that increasingly these organizations are becoming more businesslike in their operations.

Numerous nonprofits operate throughout the Commonwealth of Virginia. These include churches, hospitals, arts and cultural organizations, welfare centers for the needy of all ages, public radio and television stations.

The Virginia business community, as do business communities across the country, serves in a variety of ways. They donate dollars, products and services. A recent ruling by the United States Internal Revenue Service, which relaxes the need to appraise products donated from the inventory of a business to a charity, will remove some of the fears that both businesses and charities had in transferring such goods. It makes it easier, for example, for a supermarket to give away food to a food distribution center.

While there are no specific numbers on how much Virginia businesses give annually, nationally the figure is less than 2 percent of the pretax net income (profits before taxes) although the law permits such gifts to be as much as 20 percent of pretax net income. One reason for this, obviously, is that as important as charitable giving is, corporate profits also must be used to pay dividends to stockholders, to reinvest in the business or to otherwise expand. Hence, one way in which corporations try to meet their social responsibility is to encourage executives to be involved.

Here are a set of principles that should make such involvement more effective:

1. Recognize that a nonprofit organization is a corporation in very much the same legal sense that your business is. The Commonwealth of Virginia spells out its purpose, powers and privileges. The central difference between your business and the nonprofit corporation is that the latter cannot issue stocks and cannot pay dividends. Therefore, it has to raise capital other than by appealing to individuals' desire for financial gain. Be aware that dividends need not be dollars. They include any transfer of value.

2. Speaking about transfer of value, it is important to avoid self dealing. Surely, a business may choose to have its corporate executives serve a nonprofit for purely charitable purposes; and surely others may view this service as a means of promoting a potentially profitable relationship. How this is done, however, requires prudence. The law prohibits self-dealing—not too dissimilar from insider trading—or the use of one's relationship with the nonprofit in order to achieve an economic benefit more clearly to the advantage of the individual or his business associates than to the nonprofit organization.

3. Recognize that unlike your business, the mission of a charity is not primarily a strategic planning statement subject to change by a vote of the board of directors. In a nonprofit organization, the mission is the legal purpose for its being. Drastic deviation from its mission therefore has both legal and tax consequences.

4. One way in which a nonprofit organization may deviate from its mission is by unwarranted involvement in commercial activities. The U.S. Supreme Court, as well as the Internal Revenue Service, has sanctioned the right of nonprofit organizations to conduct commercial activities for the purpose of making a profit. In the recent year, Virginia, some other states, and the United States Congress have been reviewing that law because of complaints of abuse. Without being immersed into that controversy, do note that one reason the U.S. Congress has backed away from imposing very stringent constraints on such activities is the recognition that some commercial activity by nonprofits is central to their survival and the welfare of the communities in which they operate. Thus, a function of corporate trustees is to help bring about some balance.

5. Clearly, one motive for having a corporate executive on the board is to improve the fiscal management of the organization. Unfortunately, managers of nonprofit organizations tend to focus on budgets at the expense of understanding financial statements and the stories they can tell. Moreover, all members of the board of trustees are legally liable for the fiscal well-being of the organization. To enable you to perform this function, I have prepared ten questions.

   a. Was the revenue target in the budget met? If not, by how much was it missed and what were the reasons? Does it make sense, in light of recent experiences, to believe that such a target is reasonable? Should it be increased, decreased or kept the same? Why?

SELECTED BUSINESS AND ECONOMIC INDICATORS FOR 17 CITIES

TABLE I October, 1988

Monthly Index Number Comparisons of Current Month to Same Month in Base Period (1977) - Base Period = 100

CITY	CITY INDEX*	BANK DEBITS	BUILDING PERMITS	ELECTRICITY CONSUMED	NEWS-PAPER ADV. LINAGE	NEW CAR REGIS-TRATIONS	SEPTEMBER NON-AGRI-CULTURAL EMPLOYMENT #	WATER CONSUMED	RETAIL SALES †	POSTAL RECEIPTS
The State		403.3	155.7	163.7	116.0	170.6	147.0	97.0	179.8	349.9
Alexandria	164.2	438.9	323.3	181.4	N.A.	150.5	203.9	105.9	247.4	N.A.
Bristol	134.0	N.A.	82.3	100.4	75.8	113.8	115.3	151.4	127.1	370.6
Cape Charles - Exmore	123.8	N.A.	397.5	150.1	N.A.	95.9	N.A.	N.A.	123.8	201.3
Charlottesville	203.0	151.7	404.6	147.6	N.A.	119.7	111.7	140.9	301.1	303.2
Danville	134.2	N.A.	518.8	123.1	138.1	84.6	100.2	86.0	N.A.	237.8
Franklin	151.8	N.A.	165.7	117.6	116.0	100.0	N.A.	95.1	133.7	227.9
Fredericksburg	434.0	198.8	228.4	N.A.	173.4	178.5	N.A.	89.3	360.6	1098.9
Harrisonburg	175.2	272.3	278.7	N.A.	159.2	102.2	N.A.	N.A.	282.3	301.4
Lynchburg	297.0	320.3	145.4	133.5	N.A.	106.4	99.3	139.2	216.9	834.8
Newport News - Hampton	150.7	N.A.	242.8	147.2	101.2 ⊃	119.0	146.4 ⊃	125.5	196.3	N.A.
Norfolk - Va. Beach - Portsmouth	160.4	506.4	204.3	184.3		115.8		91.5	204.7	N.A.
Petersburg	125.8	273.4	663.4	N.A.	34.0	84.2	135.6 ⊃	115.6	266.1	223.8
Richmond	163.6	416.1	75.5	181.0	129.7	116.2		110.6	193.2	308.6
Roanoke	165.1	361.9	140.6	116.3	180.0	82.4	120.8	103.1	235.5	299.3
Staunton	150.2	170.4	222.7	N.A.	86.0	92.9	N.A.	N.A.	204.5	N.A.
Williamsburg	191.2	163.1	473.2	199.0	N.A.	166.1	N.A.	110.0	208.7	361.1
Winchester	193.2	396.6	84.3	140.2	215.6	155.6	N.A.	N.A.	N.A.	N.A.

TABLE II October, 1988

Percentage Change from Same Month Last Year.

CITY	CITY INDEX*	BANK DEBITS	BUILDING PERMITS	ELECTRICITY CONSUMED	NEWS-PAPER ADV. LINAGE	NEW CAR REGIS-TRATIONS	SEPTEMBER NON-AGRI-CULTURAL EMPLOYMENT #	WATER CONSUMED	RETAIL SALES †	SEPTEMBER RETAIL SALES ‡
The State		-0.4	56.8	3.8	-1.9	-12.0	4.1	1.2	-1.4	15.2
Alexandria	-1.0	21.1	148.0	7.1	N.A.	-12.1	5.9	-5.5	-5.7	13.9
Bristol	0.2	N.A.	5.4	4.7	7.7	-3.3	2.6	-10.0	-7.9	23.9
Cape Charles - Exmore	6.1	N.A.	396.0	7.6	N.A.	0.0	N.A.	-1.7	0.2	36.2
Charlottesville	6.7	16.8	-0.3	6.7	N.A.	-3.9	3.6	2.1	4.8	31.0
Danville	5.1	N.A.	-42.9	-2.6	-6.5	13.6	1.8	1.1	N.A.	22.9
Franklin	6.7	N.A.	24.4	-1.0	21.7	8.2	N.A.	3.0	4.4	8.1
Fredericksburg	13.5	28.2	94.5	N.A.	3.6	18.3	N.A.	7.3	16.7	15.4
Harrisonburg	4.0	13.2	-5.0	N.A.	-3.1	-10.5	N.A.	N.A.	5.4	21.1
Lynchburg	-2.1	22.5	102.4	2.0	N.A.	-29.4	1.0	5.2	-1.3	8.3
Newport News - Hampton	-1.8	N.A.	4.4	1.0	0.0 ⊃	-28.6	3.4 ⊃	-8.6	-1.3	20.9
Norfolk - Va. Beach - Portsmouth	-0.6	-5.0	-21.0	1.6		-15.9		-0.5	-2.1	12.7
Petersburg	-0.1	-69.0	-63.3	N.A.	-2.2	-18.8	4.0 ⊃	-1.8	5.8	0.9
Richmond	1.7	4.3	1690.0	3.9	-1.2	-7.3		11.6	-3.5	14.7
Roanoke	-0.5	4.7	77.5	3.6	-8.4	-5.9	-2.1	2.9	-2.0	11.0
Staunton	1.8	-6.0	56.7	N.A.	5.7	-18.8	N.A.	N.A.	10.7	-8.1
Williamsburg	2.2	8.2	-93.3	-4.9	N.A.	-22.5	N.A.	6.0	7.4	14.7
Winchester	4.4	2.6	173.7	4.4	2.5	-13.3	N.A.	N.A.	N.A.	24.2

TABLE III October, 1988

Percentage Change January - September from Same Period Last Year.

CITY	CITY INDEX*	BANK DEBITS	BUILDING PERMITS	ELECTRICITY CONSUMED	NEWS-PAPER ADV. LINAGE	NEW CAR REGIS-TRATIONS	JAN. - SEPT. NON-AGRI-CULTURAL EMPLOYMENT #	WATER CONSUMED	RETAIL SALES †	JAN. - SEPT. RETAIL SALES ‡
The State		-5.3	13.0	4.6	-0.9	0.0	4.2	0.4	-1.6	6.9
Alexandria	0.0	14.0	159.6	7.3	N.A.	0.2	6.8	1.3	-6.9	4.9
Bristol	0.5	N.A.	-0.6	3.1	-11.5	11.6	5.6	7.1	-5.2	4.5
Cape Charles - Exmore	-1.5	N.A.	137.3	10.2	N.A.	12.2	N.A.	N.A.	-10.8	1.2
Charlottesville	5.5	-29.0	9.4	4.3	N.A.	4.8	4.5	1.9	6.7	8.7
Danville	4.2	N.A.	18.3	-1.3	1.7	11.7	2.1	-7.3	N.A.	18.0
Franklin	-4.7	N.A.	30.0	0.2	-2.3	-9.2	N.A.	-7.6	-2.0	-12.4
Fredericksburg	4.7	11.0	-24.2	N.A.	-0.1	7.5	N.A.	13.3	1.7	6.9
Harrisonburg	5.4	7.6	10.2	N.A.	13.5	0.7	N.A.	N.A.	1.8	13.1
Lynchburg	2.2	5.0	-8.3	2.5	N.A.	0.1	1.0	5.3	1.5	4.2
Newport News - Hampton	-2.1	N.A.	-0.2	1.4	-2.5 ⊃	-10.6	-3.5 ⊃	-8.7	-1.5	2.2
Norfolk - Va. Beach - Portsmouth	-0.4	-10.0	5.9	4.1		-8.7		-0.4	-0.7	2.8
Petersburg	2.9	-39.8	-23.0	N.A.	4.9	3.8	-3.8 ⊃	5.9	1.4	0.9
Richmond	-1.4	-5.6	-1.3	4.3	-2.1	-0.1		6.7	-2.4	7.2
Roanoke	1.3	2.9	14.9	4.9	-2.2	-5.1	-0.7	2.7	0.0	11.7
Staunton	6.5	-1.8	17.4	N.A.	9.1	0.4	N.A.	N.A.	11.6	-5.3
Williamsburg	2.3	-12.0	-9.2	3.6	N.A.	-1.0	N.A.	4.8	2.0	2.9
Winchester	7.1	8.8	-72.3	2.4	3.8	9.8	N.A.	N.A.	N.A.	12.4

* Computation of City Index is based upon a weighted arithmetic mean of all business and economic components listed except Building Permits and Bank Debits, which are excluded because of their highly erratic nature.

\# Virginia Employment Commission data which lags behind current reports.

† Preliminary data based on a survey sample.

‡ Revised data based on sales tax information which lags behind current reports.

⊃ Only total MSA data are available for these areas.

N.A. – Not Available
0.0. – No Change

b. What form and sources of giving (revenue) showed the greatest increase? In which aspect was the outcome most disappointing? Why? Is this a trend for the future?

c. What is the composition of financial support by source? Should the organization diversify? Does the composition leave the organization vulnerable to losing its tax-exempt status because too much emphasis is placed on commercial activities unrelated to the mission of the organization? Or, is its status as a public charity threatened because of an overdependence on one person as a donor?

d. What are the major cost factors in operating the organization? What can be done to contain costs and yet not reduce the commitment of the organization to its mission?

e. What costs are rising fastest? Why? Can they be contained? How?

f. What cost centers are exceeding their budgets? Why? Was the budget allocation unreasonable? Should these allocations be realigned? Do some centers need less while others need more resources? What programs should be dropped?

g. Should some functions be put on a self-financing basis? Will they survive? Will they be able to provide additional revenues for the organization?

h. If there is a deficit, how will it be financed? How long will it be before recurrent deficits destroy the organization?

i. Is it time to change investment advisors, banks, insurance companies, board of trustees, managers?

j. If there is a cash surplus, how can it be used to finance the mission of the organization?

These ten questions, honestly answered, invariably will be adequate to provide guidance in financial planning for your organization. Each answer contains an element of fact and of judgment. For example, whether or not your organization has a deficit is fact. What strategies should be undertaken to deal with the deficit is a matter of judgment based on knowing the strategies that are available and which is most consistent with the organization's mission and capability.

Trustees and managers should not shy away from sharing their judgments in the belief that the subject is too technical or that the lawyers and accountants should make them. While few managers or trustees are cognizant of it, they can be held personally liable for the financial integrity of a tax-exempt organization. Their view is important.

For further guidance see the author's reference, Financial and Strategic Management for Nonprofit Organizations (Prentice Hall, Englewood Cliffs, New Jersey 07632). HJB

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VIRGINIA BUSINESS REPORT

Eleven issues of the Report are published annually, with no December issue. Therefore, we take this opportunity to wish all of our readers a Happy Holiday Season.

BUREAU OF BUSINESS RESEARCH, SCHOOL OF BUSINESS ADMINISTRATION
THE COLLEGE OF WILLIAM AND MARY, WILLIAMSBURG, VIRGINIA

Report No. 338 November, 1988

Business in Virginia October, 1988 Data

Only one economic indicator moved dramatically in October: the dollar volume of Virginia's building permits climbed 17.2 percent compared to October 1987. Well below last month's spectacular 56.8 percent rise, but nevertheless a strong, double-digit move. The cumulative January-October increase for building permits was 13.3 percent, over 10 percentage points below the January-October 1987 growth of 24.1 percent. The building boom has continued in Virginia during 1988 but with a clearly slower growth rate than in 1987.

Other than building permits, our economic indicators were rather flat in October. Bank debits did fall 6.9 percent, but that is a modest monthly change for such a volatile series. Both electricity and water consumption were up, implying business output is rising, but the gains were under 3 percent.

New car sales slipped again in October, down 1.3 percent versus last October. Similarly, sales per store at our sample of stores recorded a 1.0 percent drop — competition remains fierce among our expanded number of retail establishments (up 2.9 percent through the second quarter).

Looking back to September, we now have the Department of Taxation figures for that month's retail sales (last column, Table II). The statewide increase in total retail sales was a modest 1.3 percent, limited by last September's very strong performance. That brings the January-September advance in Virginia's taxable sales to 6.2 percent. The current and lagged retail sales reports indicate Virginia households are spending more than a year ago, but their retail buying is not growing as rapidly as their income.

We look for about a 6 percent statewide increase in total retail sales during the Christmas season, a season which appears to have been kicked off in late October this year. A 6 percent sales increase means real (inflation-adjusted) gains in retail trade, but only in the 2 - 3 percent range.

The shining star for Virginia remains strong, steady job growth. September payroll jobs were up 4.3 percent; and for the year to date, up 4.2 percent. That is convincing evidence of the present robust health of Virginia's economic expansion.RLP

The National Economic Outlook

During the Presidential campaign we heard few specifics about how to reduce the Federal budget deficit. The next few months will more than counterbalance that dearth — you will be bombarded with alternative proposals for deficit reduction, plus explanations and criticisms of the proposals. We will be commenting on the proposals, too, in the winter issues. For now, only three points need to be made.

First, we are making progress in Federal deficit reduction, from the peak of $221 billion in fiscal year 1986

Chart I

Nine Selected Business & Economic Indicators Percentage Change

Percentage Change October, 1988 from October, 1987

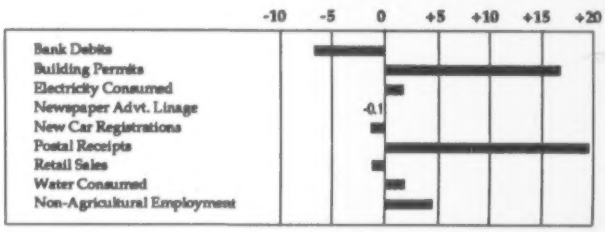
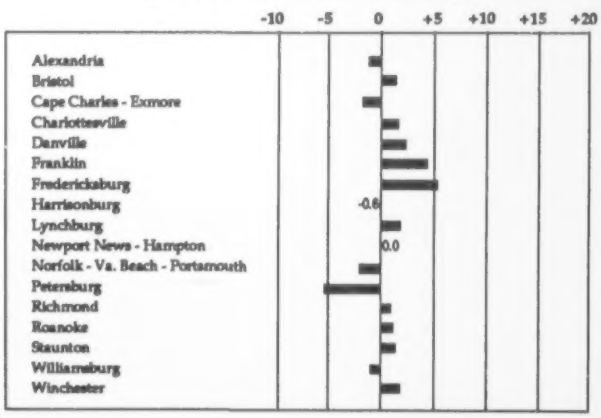


Chart II

City Indices

Percentage Change October, 1988 from October, 1987



SELECTED BUSINESS AND ECONOMIC INDICATORS FOR 17 CITIES

TABLE I October, 1968

Monthly Index Number Comparisons of Current Month to Same Month in Base Period (1977) - Base Period = 100

CITY	CITY INDEX*	BANK DEBITS	BUILDING PERMITS	ELECTRICITY CONSUMED	NEWS-PAPER ADV. LINAGE	NEW CAR REGIS-TRATIONS	SEPTEMBER NON-AGRI-CULTURAL EMPLOYMENT #	WATER CONSUMED	RETAIL SALES †	POSTAL RECEIPTS
The State		389.1	197.8	140.3	121.9	144.8	147.8	98.1	174.0	472.5
Alexandria	153.3	525.7	440.0	155.5	N.A.	133.9	202.7	90.2	163.5	N.A.
Bristol	183.1	N.A.	125.0	96.8	73.2	105.3	122.6	118.2	133.4	365.6
Cape Charles - Exmore	125.1	N.A.	606.9	134.0	N.A.	89.4	N.A.	N.A.	105.7	210.0
Charlottesville	212.5	160.2	190.2	134.9	N.A.	116.1	115.4	144.0	285.3	393.9
Danville	135.8	N.A.	185.6	117.7	134.2	87.1	104.5	97.5	N.A.	273.7
Franklin	148.3	N.A.	111.1	122.0	175.4	82.0	N.A.	96.7	127.8	326.7
Fredericksburg	361.5	247.4	412.4	N.A.	174.7	169.7	N.A.	92.1	113.5	1990.2
Harrisonburg	191.0	295.9	696.4	N.A.	176.8	81.2	N.A.	155.2	188.8	357.5
Lynchburg	260.2	406.4	189.8	117.9	N.A.	91.5	100.6	123.4	179.4	1270.0
Newport News - Hampton	159.2	N.A.	407.4	119.6	107.4	85.5	146.0	118.0	179.3	N.A.
Norfolk - Va. Beach - Portsmouth	170.3	457.8	225.3	145.4		91.8		89.3	260.8	N.A.
Petersburg	123.8	89.6	235.1	N.A.	36.2	59.1	136.8	121.9	170.3	N.A.
Richmond	166.0	421.8	179.7	158.3	137.0	112.7	121.6	119.4	144.7	396.1
Roanoke	161.1	355.2	117.1	106.5	173.6	77.8	N.A.	107.0	144.8	428.7
Staunton	163.3	155.4	127.8	N.A.	97.7	69.0		N.A.	168.3	308.2
Williamsburg	187.7	200.3	248.4	171.5	N.A.	126.8	N.A.	114.5	139.8	479.4
Winchester	173.1	426.1	62.1	137.9	254.1	127.2	N.A.	N.A.	N.A.	N.A.

TABLE II October, 1968

Percentage Change from Same Month Last Year.

CITY	CITY INDEX*	BANK DEBITS	BUILDING PERMITS	ELECTRICITY CONSUMED	NEWS-PAPER ADV. LINAGE	NEW CAR REGIS-TRATIONS	SEPTEMBER NON-AGRI-CULTURAL EMPLOYMENT #	WATER CONSUMED	RETAIL SALES †	SEPTEMBER RETAIL SALES ‡
The State		-6.9	17.2	2.1	-0.1	-1.3	4.3	2.5	-1.0	1.3
Alexandria	-1.1	15.0	113.2	4.6	N.A.	10.7	5.7	-13.1	-6.3	2.4
Bristol	2.2	N.A.	16.1	5.1	-3.4	30.1	7.3	-9.4	-0.2	-8.9
Cape Charles - Exmore	-1.9	N.A.	13.1	4.9	N.A.	-1.8	N.A.	29.8	-4.8	-4.9
Charlottesville	2.0	-2.5	23.2	4.6	N.A.	3.5	3.8	7.3	1.3	-7.0
Danville	3.4	N.A.	26.1	1.2	-6.7	6.0	2.9	10.5	N.A.	6.6
Franklin	4.3	N.A.	-17.0	7.3	22.5	4.2	N.A.	12.0	-10.5	19.5
Fredericksburg	5.3	14.7	232.0	N.A.	-12.4	-8.8	N.A.	9.5	13.7	7.4
Harrisonburg	-0.6	11.3	56.8	N.A.	8.5	-14.7	N.A.	-1.2	0.9	0.6
Lynchburg	2.8	14.1	103.3	1.2	N.A.	12.4	-0.3	0.0	3.6	-1.6
Newport News - Hampton	0.0	N.A.	95.4	1.1	1.6	-4.9	3.2	2.3	0.7	-5.1
Norfolk - Va. Beach - Portsmouth	-2.9	-18.0	12.5	-3.4		-16.0		-1.1	-1.0	-7.8
Petersburg	-5.1	-52.1	71.8	N.A.	8.1	-28.7	4.3	1.7	-8.3	-7.4
Richmond	0.8	-5.8	-44.2	3.1	1.3	0.8	-0.9	7.7	-3.9	2.0
Roanoke	1.4	-3.8	41.7	4.0	-5.7	3.5	N.A.	6.3	3.7	-5.8
Staunton	2.3	-10.3	-77.0	N.A.	9.1	-22.4		N.A.	12.1	-9.1
Williamsburg	-1.1	17.2	-20.5	-1.7	N.A.	-18.3	N.A.	8.6	2.4	-3.4
Winchester	1.8	-0.9	-81.1	5.1	2.5	-7.7	N.A.	N.A.	N.A.	7.4

TABLE III October, 1968

Percentage Change January - October from Same Period Last Year.

CITY	CITY INDEX*	BANK DEBITS	BUILDING PERMITS	ELECTRICITY CONSUMED	NEWS-PAPER ADV. LINAGE	NEW CAR REGIS-TRATIONS	JAN. - SEPT. NON-AGRI-CULTURAL EMPLOYMENT #	WATER CONSUMED	RETAIL SALES †	JAN. - SEPT. RETAIL SALES ‡
The State		-5.5	13.3	4.4	-0.8	-0.1	4.2	0.8	-1.6	6.2
Alexandria	-0.2	14.1	156.6	7.1	N.A.	1.1	6.1	-0.2	-6.8	4.6
Bristol	0.7	N.A.	1.5	3.2	-10.6	13.3	6.1	5.2	-4.7	2.8
Cape Charles - Exmore	-3.7	N.A.	118.0	N.A.	N.A.	10.8	N.A.	N.A.	-9.8	0.5
Charlottesville	5.1	-27.3	10.1	4.3	N.A.	4.7	4.4	2.5	6.1	6.7
Danville	5.0	N.A.	19.2	N.A.	0.7	11.2	2.3	-5.6	N.A.	16.6
Franklin	-3.9	N.A.	26.4	0.8	0.6	-8.3	N.A.	-5.9	-2.9	-9.5
Fredericksburg	4.7	11.4	-19.3	N.A.	-1.5	5.9	N.A.	12.9	3.0	8.9
Harrisonburg	4.8	8.0	13.8	N.A.	12.9	-0.8	N.A.	N.A.	1.7	11.5
Lynchburg	2.2	5.9	-2.5	2.4	N.A.	1.1	0.8	4.7	1.7	3.5
Newport News - Hampton	-2.0	N.A.	8.0	1.3	-2.1	-10.1	3.3	-7.7	-1.2	1.3
Norfolk - Va. Beach - Portsmouth	-0.7	-11.4	6.5	3.4		-9.4		-0.5	-0.8	1.5
Petersburg	1.0	-40.8	-17.8	N.A.	-3.6	0.4	3.9	5.5	0.5	-0.1
Richmond	1.3	-5.6	-5.7	4.2	-1.7	0.0	-0.9	6.8	-2.8	6.8
Roanoke	1.2	2.2	17.5	4.9	-2.6	-4.4	N.A.	3.0	0.4	9.5
Staunton	5.5	-2.8	-7.4	N.A.	N.A.	-1.8		N.A.	11.7	-5.7
Williamsburg	2.0	-9.3	6.1	3.1	N.A.	-2.9	N.A.	5.2	2.1	2.1
Winchester	6.5	7.7	-72.8	2.8	3.6	8.0	N.A.	N.A.	N.A.	11.8

* Computation of City Index is based upon a weighted arithmetic mean of all business and economic components listed except Building Permits and Bank Debits, which are excluded because of their highly erratic nature.
\# Virginia Employment Commission data which lags behind current reports.
† Preliminary data based on a survey sample.
‡ Revised data based on sales tax information which lags behind current reports.
⊃ Only total MSA data are available for these areas.

N.A. – Not Available
0.0 – No Change

to $155 billion in fiscal year 1988. In the process, the deficit is changing from a severe threat to a painful thorn, inhibiting action to meet other pressing national needs.

Secondly, no matter what is said, the best the public can hope for is a deficit reduction package that will come close to meeting the present (1987) Gramm-Rudman-Hollings' target of $100 billion in fiscal year 1990. The actual result, when released in October of 1990, is more likely to be a deficit of $125 billion or more. Deficit reduction will remain a thorny problem for the President and Congress well after 1990, most likely into the next presidential term of office.

Thirdly, the deficit reduction compromise reached by President Bush and the Congress, while needed and important, will be very modest in its 1990 impact on the economy, certainly not strong enough to halt the U.S. economic expansion. Therefore my advice is to look past the deficit issue to the economic performance of the private sector.

The U.S. economy will experience slower real growth in 1989 than in 1988 — 2.7 percent versus 3.8 percent. That will be consistent with capacity additions of about 2.5 percent and allow us to hold inflation to 4.3 percent (GNP Implicit Price Deflator) and 5.0 percent (Consumer Price Index). The high-growth sectors again will be exports (8 percent real growth) and equipment purchases by businesses (up 6 percent in real terms). Both of those growth rates however are less than half of the 1988 ones (17 and 15 percent, respectively).

We expect personal consumption expenditures to rise 2.2 percent in real terms, slightly less than the 2.6 percent for 1988. For most retail goods, real demand will grow less than 2 percent while services will continue to absorb a higher percent of consumer spending.

The moderate real growth of 1989 should extend through 1990, with 2.2 percent real growth in that year. Neither U.S. fiscal policy nor monetary policy threatens to kill the expansion, and the private sector is not displaying the prominent imbalances normally preceding a recession. Therefore our Virginia forecast is based on two years of moderate but stable real growth for the United States.RLP

The Virginia Economic Outlook

The Virginia economy is coasting at the present. Not the way an automobile coasts to a halt when your foot is off of the gas pedal. More like the space shuttle coasts after engine shutdown as it moves toward orbit — decelerating certainly, but still moving at a spectacular speed with no prospect of stopping once orbit is reached.

Virginia's nonagricultural payroll job growth reached 5.7 percent in 1984, and the rate has slowed steadily since then to 4.7 percent in 1987 and 4.4 percent in 1988. The total real income (adjusted for inflation using the Consumer Price Index) of Virginia residents increased by 6.2 percent in 1986, then the growth rate fell to 5.8 percent in 1987 and an estimated 4.3 percent in 1988. By both measures, Virginia's economic growth has decelerated; but by both measures we still are growing at well above the national average. Our income gains in 1986 and 1987 ranked us among the 10 fastest-growing states, and we will place there again for 1988.

The level of income we have reached also is far above the average. The Virginia per capita income was $16,517 in 1987, the tenth highest in the nation and 107 percent of the national average. In this high-level, high-growth environment, descriptors such as "coasting" and "decelerating" describe an economy converging to its own above-average long-term trend, with growth still above the national average. Compared to the nation we are "upwardly divergent", widening our edge over the nation, and we are capable of maintaining that status well into the next century.

When the final statistics for 1988 are available, they undoubtedly will show Virginia personal income above the $100 billion mark, at $105.8 billion; and a population of 6 million, yielding an income per capita to $17,633.

The estimated payroll job growth of 4.4 percent for 1988 continues to be dominated by new jobs in the service-producing industries, which account for 57 percent of Virginia employment — wholesale and retail trade, transportation and public utilities, FIRE (finance, insurance, and real estate), and the more narrowly defined private services. Such jobs have increased 6.0 percent in 1988. Supplementing that service growth has been the continued boom in construction, with that industry's jobs rising 7.1 percent to 195,000.

For 1989 we predict Virginia income growth will barely slow down, to 8.3 percent, as total income rises to $114.6 billion. Higher inflation of 5.0 percent however holds the real income gain to 3.2 percent, a full point below the 1988 advance (see Table IV for specific numbers). Population growth also will decelerate, but the net effect will be a decline in the growth of real income per capita to 1.7 percent.

Job growth in Virginia will slow in 1989 to 3.2 percent. The main reason will be a lower 5.1 percent climb in service-producing industry jobs, with trade jobs in particular increasing more slowly. The booming expansion of commercial establishments in recent years is yielding to a more moderate pace as supply has overtaken consumer demand. For construction we expect a modest drop in 1989 employment. Both commercial and residential construction have soared since 1982, reaching levels that cannot be sustained by the current business and household growth rates in Virginia. A cutback to more sustainable levels is overdue and therefore likely to occur in 1989 and 1990. Note, though, the cutback is expected to be very moderate, 2.6 percent in 1989 and 4.2 percent in 1990.

The more moderate 1989 real income growth for Virginia will be accompanied by about the same 2-2.5 percent real gain in retail sales as in 1987. That means about

a 7.1 percent increase in actual sales receipts, slightly above the 6.8 percent predicted for 1988. No consumer buying spree, but no further belt-tightening, either. The mix of retail sales will shift, with less growth in construction-related goods and furnishings and more in personal items.

In sum, 1989 will be a year of slightly slower growth in Virginia, coasting compared to the high growth rates in recent years. Do not be fooled by these seemingly low speeds — we still will be widening the income gap between us and the nation. We also expect the same pattern of growth to continue in Virginia through 1990.RLP

TABLE IV

VIRGINIA INCOME AND EMPLOYMENT
1987 LEVEL PLUS PROJECTIONS
FOR 1988 THROUGH 1990

	1987 LEVEL	% CHANGE '87-'88	1988 LEVEL	% CHANGE '88-'89	1989 LEVEL	% CHANGE '89-'90	1990 LEVEL
INCOME ($ MILLION)	$97,515	8.5%	$105,800	8.3%	$114,600	7.5%	$123,200
POPULATION (THOUSANDS)	5,904	1.8%	6,000	1.4%	6,085	1.3%	6,165
INCOME PER CAPITA	$16,517	6.8%	$17,633	6.8%	$18,833	6.1%	$19,984
REAL PERSONAL INCOME (MILLIONS OF 1982$)	$85,841	4.3%	$89,510	3.2%	$92,337	2.4%	$94,541
REAL INCOME PER CAPITA	$14,539	2.8%	$14,918	1.7%	$15,175	1.1%	$15,335
RETAIL SALES	$37,033	6.8%	$39,550	7.1%	$42,375	6.8%	$45,300
EMPLOYMENT (000s)	2,678	4.4%	2,795	3.2%	2,885	2.3%	2,950
MANUFACTURING (000s)	429	0.2%	430	0.7%	433	0.5%	435
MINING (000s)	16	-2.6%	15	-1.3%	15	0.0%	15
CONSTRUCTION (000s)	182	7.1%	195	-2.6%	190	-4.2%	182
TRADE, SERVICES, TRANSPORTATION AND PUBLIC UTILITIES, AND FIRE (000s)	1,523	6.0%	1,615	5.1%	1,697	3.9%	1,763
GOVERNMENT (000s)	528	2.2%	540	1.9%	550	0.9%	555

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BUREAU OF BUSINESS RESEARCH, SCHOOL OF BUSINESS ADMINISTRATION
THE COLLEGE OF WILLIAM AND MARY, WILLIAMSBURG, VIRGINIA

Report No. 339 January, 1989

Business in Virginia
November and December, 1988 Data

November produced some swings in the growth rates of our Virginia indicators. Bank debits reversed from being down 6.9 percent to up 11.2 percent for November. Building permits moved from an October gain of 17.2 percent to a November decline of 6.8, and electricity consumption also switched from positive (+2.1 percent) to negative (-6.1 percent).

Our sample of retail stores reported no change for November in sales per store compared to last November (next to last column, November Table II). We now know total retail sales for November (last column, December Table II) fell 3.4 percent statewide, with 15 of our 17 urban areas experiencing declines. Thus November was a disappointment to many retailers.

The economic indicators for which we have December data mostly showed gains compared to December 1987, but with substantial differences in the gains. Building permits statewide exploded, up 38.0 percent. Last December's dollar amount was unusually low, though, due to a lull after the stock market crash. Therefore the big jump this year did not bring the total back to the December 1986 level.

New car registrations in Virginia recorded a more modest but still surprising increase of 8.0 percent. That statewide rise was driven primarily by a 30.1 percent jump in Northern Virginia's sales, but five other urban areas also experienced double-digit increases. Thus in much of the state Virginians did not shun the big-ticket item, a new car, this Christmas.

Sales per store by our sample of retail establishments grew by 1.9 percent in December. That is a better gain than in most months of 1988, giving us another preliminary indication that Virginia consumers did spend more freely as Christmas drew near. That 1.9 percent increase however is less than the rate of inflation, so the real volume per store remained flat. The full taxable sales data for December, available next month, will show a much stronger gain; but, those total sales are being shared among many more stores than a year ago, holding sales per store to little or no real growth.

Electricity consumption increased 7.3 percent, in tandem with a water consumption rise of 1.4 percent. Those two improvements strongly imply good year-end gains in business output, backed up by the high rate of job growth experienced through November.

The generally good December performance improved the cumulative 1988 results. Building permits for the year were up 13.2 percent. That offset the 1987 decline of 11.6 percent, pulling the dollar amount for 1988 even with the 1986 level. If we adjust for inflation, the real value of 1988 construction is below the 1986 peak. Nevertheless Virginia's construction emlployment rose steadily in 1988 to an all-time peak. The booming growth of construction jobs has endured for 6 years, long enough to seem a permanent part of Virginia's economic outlook. Unfortunately the recent growth of construction employment cannot be sustained by the current rates of business and household expansion. As New England and much of the South Atlantic region have experienced recently, Virginia is heading towards some decline in construction activity.

Chart I

Nine Selected Business & Economic Indicators Percentage Change

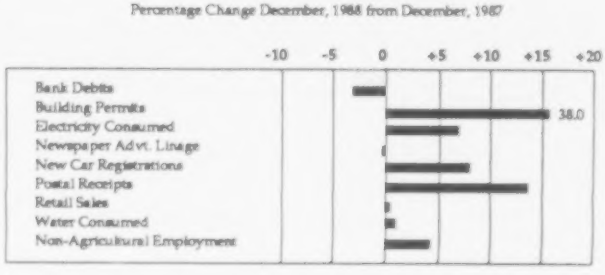
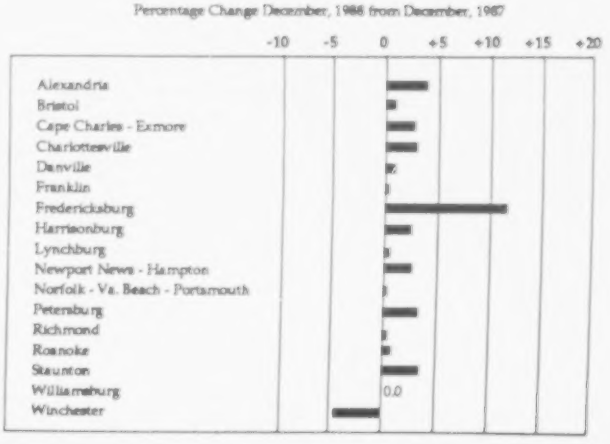


Chart II

City Indices



With the 8 percent advance in December, the 1988 new car registrations across the state pulled slightly ahead of 1987, up 0.2 percent. The year-end surge in car buying at least prevented a drop for the year. That was not the case for our sample of retail stores. The modest December gain of 1.9 percent left them with a decline of 0.9 percent for the year in the average sales per store. Total retail sales in Virginia through November, as reported by the Virginia Department of Taxation, were up 5.7 percent compared to January-November 1987 (using our adjusted January figures, as explained earlier in the year). Adding in the December figures will help, but the year's increase still will be under 7 percent. Here in Virginia as nationally, consumer spending no longer is the strong growth leader of years past.

Nonagricultural job growth remains very strong in Virginia, up 4.3 percent through November (latest month available). Another year of above-average employment gains lies ahead. But, with more moderate consumption growth and a leveling off in construction, the job growth will be somewhat less—our November prediction was 3.2 percent for 1989.RLP

Note that Table I, with the Monthly Index levels, is not included this month. Those numbers for the state and the urban areas are available on request.

Presidential Projections for 1989-1994

The medium-term economic projections underlying President Reagan's January 9 budget proposal are likely to be adopted by both President Bush and the Congress in developing their budget plans. President Reagan's Council of Economic Advisors described those projections at some length in the January 1989 Economic Report of the President.

We wanted our readers to know both the projected growth rates and the logic behind them prior to President Bush's February 9 budget message to Congress. Therefore, the remainder of this article and Tables IV and V are taken directly from pages 283-287 of the Economic Report of the President—with italics added by us for emphasis.

Note particularly that these projections are not referred to as "most-likely" forecasts. They are projections contingent upon the desired fiscal policy and monetary policy being adopted and successfully implemented.

The crucial private market element is a strong acceleration in the growth of real output per hour, to 2.1 percent annually by 1992. Then, the average annual 1988-1994 productivity growth for the nonfarm business sector will be 1.9 percent—three times the average annual rate for 1973-1981 and one-third higher than the 1981-1988 average. Will we see that large an acceleration that quickly? You be the judge.

Table [IV] summarizes the Administration's medium-term economic projections for the period 1990 through 1994. The projections are not year-to-year forecasts; rather, they indicate expected trends based on underlying factors ... that will allow continued expansion of the economy's capacity to produce. *These projections are contingent on the successful implementation of current and proposed government policies and on the assumption of no serious shocks to growth.* Implicit in these figures is the assumption that the free-market, incentive-oriented policies of this Administration, which have promoted the growth and more efficient use of national resources, will continue in the coming years. In particular, the projections embody the assumption that Federal spending continues to be brought under control and that the benefits of tax reform are retained. *Through spending restraint and economic growth, the Federal deficit is assumed to decline in line with the Gramm-Rudman-Hollings targets for deficit reduction. It is also assumed that the Federal Reserve provides sufficient expansion of monetary aggregates to maintain economic growth, while fostering continued progress toward the long-term goal of price stability.*

The long-run improvement in the Nation's standard of living depends importantly on expansion of its capacity to produce, which in turn is determined by the growth and productiveness of its resources.

Over the projection period, these long-run forces—growth of the labor force and labor productivity—are supplemented by changes in the utilization of capital and labor.

A detailed breakdown of the components that make up these sources of growth, organized into an accounting framework, is presented in Table [V]. In order to focus on trends in the economy and to avoid the complications of cyclical fluctuations, the first two columns of the table show growth rates from business cycle peak to business cycle peak for historical periods. The third column shows growth from the peak of the last business cycle through the third quarter of 1988, and the final column presents growth rates over the projection period, which extends through 1994.

The table shows that the average growth rate of real GNP through 1994 is projected to be 3.2 percent per year, the same as the average rate for the 1948-1981 postwar period

Critical to these projections is the assumption of continued productivity growth at the average rate of increase achieved from 1948 to 1981. This assumption recognizes favorable trends in the economy that are expected to restore productivity growth to its previous trend, as well as policy initiatives that are expected to promote technological change and growth in physical and human capital. Aging of the the baby-boom generation implies a trend toward a more experienced, more educated, and more skilled work force that should translate into improved productivity growth in the coming years. Slower growth of the labor force will facilitate capital deepening in coming years, that is, an increase in the stock of capital per employed worker. *Continued stability and gradual decline of the inflation rate should also contribute to stronger productivity growth by reducing the cost of capital source allocation. Oil and energy prices are expected to remain lower than in the late 1970s and the early 1980s, implying that firms will have more resources to spend on investments that enhance general productivity than on investments that reduce energy costs.*

Government policies should also contribute to increased productivity growth. Partly as a result of government initiatives, research and development expenditures as a share of GNP are expected to remain higher than in the 1970s, thus promoting innovation and technological change. Government initiatives to improve education and to promote investment in knowledge and human capital should also lift productivity growth. Tax reform has lessened the distortions to investment decisions by establishing more equal effective tax rates across investment activities. This effect, coupled with policy initiatives to lower market barriers and distortions, will allow capital and labor to realize their productive potential more fully. *Finally, avoiding short-run stabilization policies will increase the likelihood of maintaining a noninflationary economic environment.* That environment will, in turn, allow private producers to concentrate on achieving higher productivity growth and profitability.

SELECTED BUSINESS AND ECONOMIC INDICATORS FOR 17 CITIES

TABLE II NOVEMBER, 1988 — Percentage Change from Same Month Last Year.

CITY	CITY INDEX*	BANK DEBITS	BUILDING PERMITS	ELECTRICITY CONSUMED	NEWS-PAPER ADV. LINAGE	NEW CAR REGIS-TRATIONS	OCTOBER NON-AGRI-CULTURAL EMPLOYMENT #	WATER CONSUMED	SAMPLE RETAIL SALES †	OCTOBER TOTAL RETAIL SALES ‡
The State		11.2	-6.8	-6.1	-3.9	-3.8	4.5	5.3	0.0	10.5
Alexandria	2.3	48.1	-52.6	8.3	N.A.	7.0	5.8	-8.8	-2.1	12.4
Bristol	1.5	N.A.	146.1	6.5	-12.9	-2.9	8.0	-0.5	1.0	11.9
Cape Charles - Exmore	-4.4	N.A.	11.3	1.9	N.A.	7.5	N.A.	-9.0	-13.1	8.2
Charlottesville	5.2	8.8	623.3	6.5	N.A.	-4.5	2.5	-0.4	8.4	12.4
Danville	7.2	N.A.	-14.4	-1.1	-6.4	20.1	3.7	6.5	N.A.	20.3
Franklin	3.7	N.A.	16.7	3.7	-0.2	8.3	N.A.	-3.8	7.7	-1.6
Fredericksburg	11.3	24.4	38.4	N.A.	-1.5	14.5	N.A.	16.2	12.3	12.6
Harrisonburg	9.5	19.3	217.0	N.A.	5.2	-0.8	N.A.	2.9	18.3	4.0
Lynchburg	9.0	8.5	-48.1	4.7	N.A.	11.4	1.1	29.4	2.7	17.4
Newport News - Hampton	1.9	N.A.	-26.7	4.6	-2.6	-5.6	3.0	N.A.	2.0	9.6
Norfolk - Va. Beach - Portsmouth	-1.0	0.0	6.6	5.1		-6.6		N.A.	-3.8	4.5
Petersburg	4.0	-45.1	-39.7	N.A.	-3.6	-2.4	4.1	24.0	2.2	3.6
Richmond	-2.1	12.7	163.2	5.6	-6.4	-12.4		4.0	-5.6	3.2
Roanoke	2.5	15.7	-59.0	3.0	-14.6	0.9	-0.7	2.8	2.3	24.2
Staunton	13.6	6.7	2689.6	N.A.	-0.4	3.2	N.A.	N.A.	24.2	6.4
Williamsburg	8.8	23.8	11.5	24.5	N.A.	30.7	N.A.	8.6	-4.0	9.8
Winchester	13.8	21.6	-81.5	2.7	20.3	9.0	N.A.	N.A.	N.A.	23.2

TABLE II DECEMBER, 1988 — Percentage Change from Same Month Last Year.

CITY	CITY INDEX*	BANK DEBITS	BUILDING PERMITS	ELECTRICITY CONSUMED	NEWS-PAPER ADV. LINAGE	NEW CAR REGIS-TRATIONS	NOVEMBER NON-AGRI-CULTURAL EMPLOYMENT #	WATER CONSUMED	SAMPLE RETAIL SALES †	NOVEMBER TOTAL RETAIL SALES ‡
The State		-3.0	38.0	7.3	-0.3	8.0	4.5	1.4	1.9	-3.4
Alexandria	4.4	13.1	-17.9	8.5	N.A.	30.1	8.2	2.1	-2.7	-4.0
Bristol	1.9	N.A.	-73.1	4.6	-4.5	30.1	7.3	-12.2	-0.7	-6.2
Cape Charles - Exmore	3.5	N.A.	27.7	9.6	N.A.	43.5	N.A.	-5.3	-2.2	-17.0
Charlottesville	3.9	10.2	-38.0	10.5	N.A.	-7.0	3.6	5.3	7.7	-4.3
Danville	1.8	N.A.	766.7	1.3	-13.5	10.9	3.7	4.8	N.A.	3.8
Franklin	0.4	N.A.	5647.9	15.2	3.7	6.3	N.A.	9.5	-0.7	-29.6
Fredericksburg	11.9	15.5	8.1	N.A.	1.8	15.6	N.A.	21.6	14.1	1.7
Harrisonburg	2.5	14.0	45.9	N.A.	7.4	-9.4	N.A.	-18.0	16.3	-11.4
Lynchburg	0.9	11.7	132.2	0.0	N.A.	-6.4	1.9	8.5	3.2	-6.6
Newport News - Hampton	2.7	N.A.	192.6	9.1	4.6	3.4	2.9	-4.9	7.6	-14.0
Norfolk - Va. Beach - Portsmouth	0.3	-13.9	3.7	9.0		-5.6		1.7	-0.9	-7.3
Petersburg	3.6	-49.3	-4.8	N.A.	N.A.	-38.9	4.1	2.5	8.0	-17.2
Richmond	0.4	-3.0	-9.7	7.0	-4.3	-10.5		4.7	2.1	-4.0
Roanoke	0.6	11.6	-68.2	5.6	-3.1	12.2	0.2	-4.4	0.4	-6.1
Staunton	3.8	7.6	-10.2	N.A.	-8.5	4.7	N.A.	N.A.	17.5	-25.8
Williamsburg	0.0	9.0	756.6	3.7	N.A.	-17.1	N.A.	13.4	4.9	-7.2
Winchester	-4.6	18.4	24.3	2.1	3.1	-16.9	N.A.	N.A.	-4.6	-6.6

TABLE III DECEMBER, 1988 — Percentage Change January - Decemberr from Same Period Last Year.

CITY	CITY INDEX*	BANK DEBITS	BUILDING PERMITS	ELECTRICITY CONSUMED	NEWS-PAPER ADV. LINAGE	NEW CAR REGIS-TRATIONS	JAN. - NOV. NON-AGRI-CULTURAL EMPLOYMENT #	WATER CONSUMED	SAMPLE RETAIL SALES †	JAN. - NOV. TOTAL RETAIL SALES ‡
The State		-4.2	13.2	4.8	-1.1	0.2	4.3	0.9	-0.9	5.7
Alexandria	0.5	16.5	89.0	7.3	N.A.	3.5	6.6	-0.7	-5.7	4.4
Bristol	0.9	N.A.	-0.5	3.6	-10.4	13.4	6.4	3.4	-3.8	2.7
Cape Charles - Exmore	-1.3	N.A.	89.8	8.3	N.A.	12.4	N.A.	N.A.	-9.3	-0.4
Charlottesville	5.1	24.4	24.8	5.0	N.A.	3.4	4.2	2.5	6.5	6.1
Danville	4.0	N.A.	36.3	-0.7	-1.4	11.8	2.5	-4.0	N.A.	15.6
Franklin	-3.1	N.A.	168.9	2.3	0.9	-6.6	N.A.	-4.7	-1.8	-11.2
Fredericksburg	6.2	12.8	-16.3	N.A.	-1.3	7.0	N.A.	13.8	5.6	6.9
Harrisonburg	5.9	9.5	28.4	N.A.	11.6	-1.3	N.A.	8.2	4.8	8.2
Lynchburg	2.7	6.6	-6.5	2.4	N.A.	1.3	1.1	7.0	2.0	3.5
Newport News - Hampton	-0.4	N.A.	16.4	2.1	-1.5	-8.9	3.3	N.A.	0.5	0.4
Norfolk - Va. Beach - Portsmouth	0.7	-10.3	6.3	4.0		-8.9		N.A.	-1.1	0.9
Petersburg	1.7	-41.7	-17.8	N.A.	N.A.	-3.1	4.0	6.5	1.9	-1.5
Richmond	1.1	-4.4	-1.4	4.5	-2.4	-1.6		6.4	-2.0	5.2
Roanoke	1.2	4.0	5.1	4.8	-3.9	-3.0	-0.6	2.4	0.6	9.0
Staunton	6.4	-1.1	28.1	N.A.	N.A.	-1.1	N.A.	N.A.	13.3	-6.9
Williamsburg	2.6	-5.2	19.9	4.6	N.A.	-2.0	N.A.	6.0	2.6	2.0
Winchester	6.2	9.8	-72.3	2.6	5.1	6.3	N.A.	N.A.	N.A.	10.8

* Computation of City Index is based upon a weighted arithmetic mean of all business and economic components listed except Building Permits and Bank Debits, which are excluded because of their highly erratic nature.
\# Virginia Employment Commission data which lags behind current reports.
† Preliminary data based on a survey sample.
‡ Total sales based on sales tax information which lags behind current reports.
Petersburg MSA data are available for these areas.

N.A. – Not Available
0.0. – No Change

TABLE IV ADMINISTRATION ECONOMIC ASSUMPTIONS, 1988-94

ITEM	1988	1989	1990	1991	1992	1993	1994
	Percent Change, Year to Year						
Real GNP	3.8	3.2	3.2	3.3	3.2	3.2	3.2
Real compensation per hour, nonfarm bus.	0.5	0.9	1.2	1.8	2.0	1.9	1.9
Output per hour, nonfarm business	1.5	1.2	1.8	2.0	2.1	2.1	2.1
Consumer price index	4.0	3.8	3.7	3.2	2.7	2.2	1.7
	Annual Level						
Employment (millions, including Armed Forces)	116.7	118.8	120.4	122.3	124.0	125.7	127.4
Unemployment rate (percent)	5.4	5.2	5.1	5.0	5.0	5.0	5.0

TABLE V ACCOUNTING FOR GROWTH IN REAL GNP, 1948-94

ITEM	1948 IV to 1981 III	1973 IV to 1981 III	1981 III to 1988 III	1988 III to 1994 IV
GROWTH IN:				
Civilian employment	1.7	2.0	2.0	1.5
PLUS: Nonfarm business employment as share of civilian employment	0.1	0.1	0.3	0.2
EQUALS: Nonfarm business employment	1.7	2.1	2.3	1.7
PLUS: Average weekly hours (nonfarm business)	-0.4	-0.6	-0.1	-0.1
EQUALS: Hours of all persons (nonfarm business)	1.4	1.5	2.2	1.6
PLUS: Output per hour (productivity, nonfarm business)	1.9	0.6	1.4	1.9
EQUALS: Nonfarm business output	3.3	2.2	3.7	3.6
PLUS: Nonfarm business output as share of real GNP	0.0	-0.1	0.7	0.4
EQUALS: Real GNP	3.3	2.2	3.0	3.2

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VIRGINIA BUSINESS REPORT

BUREAU OF BUSINESS RESEARCH, SCHOOL OF BUSINESS ADMINISTRATION
THE COLLEGE OF WILLIAM AND MARY, WILLIAMSBURG, VIRGINIA

Report No. 340 February, 1989

Business in Virginia January, 1989 Data

Weather had a strong positive influence on Virginia's economic performance in January (February will be a very different story!). Sunny, unseasonably warm days sent building permits soaring, up 46.8 percent statewide compared to January of 1988. Households got out of the house and shopped, too. Our sample of retail stores reported a 1.7 percent increase in January, almost equal to December's 1.9 percent gain. Extrapolating that evidence to all retail establishments indicates total retail sales rose strongly during January, probably a double-digit advance from the same month last year.

Virginia consumers' largesse generally did not extend to new cars, up only 0.1 percent. However, car buying varied widely around the state, ranging from a 48.5 percent increase in the Bristol, Virginia area to a 29.2 percent drop in Petersburg.

Bank debits at our sample of financial institutions gained only 2.4 percent statewide due to large decreases in Charlottesville and Norfolk. Spending rose quite strongly in most other areas, showing businesses as well as households spent quite freely in January.

The frequently balmy weather produced a few negatives, most notably a decrease in electricity consumption as heat pumps sat idle. Electricity usage fell 2.3 percent statewide from January 1988 levels, with most of our localities experiencing a decline.

The big news is not the January data, but what we now know about December 1988 retail spending in Virginia. Contrary to our expectations, Virginia households evidently bought at a record pace in the final days before Christmas. The Virginia Department of Taxation data on sales tax receipts show December retail sales totalled $5.0 billion. That is not only an astounding dollar total but also represents a 29.6 percent jump for December 1988 retail sales versus December 1987. A portion of the increase could be reporting anomalies since November sales showed a statewide decrease of 3.4 percent. However, shifting a portion of the sales gain to November still would leave close to a 20 percent gain for December. Any way you look at it, Virginia consumers spent very generously at year-end. The individual area data in the last column of Table II confirms nearly every area of the state experienced very high double-digit increases—and thirteen of our 17 areas reported sales growth of 20 percent or higher.

That last-minute surge turned 1988 from a so-so year to a fairly good one for many retailers. Our estimate, based on the preliminary data available, is Virginia's retail sales subject to the general sales tax reached $39.1 billion in 1988, up 6.6 percent from 1987.

Nationally, consumers did spend more freely in December than during most of the year. But, not nearly as freely as in Virginia. The December to December increase nationwide in total retail sales excluding the automobile group was 6.9 percent, only a fraction of the Virginia growth rate.

For all of 1988, the year-over-year rise in national retail sales excluding autos was 5.6 percent. Therefore Virginia's taxable retail sales growth exceeded the nation's gain, for a fairly comparable retail measure, by about a percentage point. Not as wide a margin as in some recent years, but still a plus for Virginia.RLP

Chart I

Nine Selected Business & Economic Indicators Percentage Change

Percentage Change January, 1989 from January, 1988

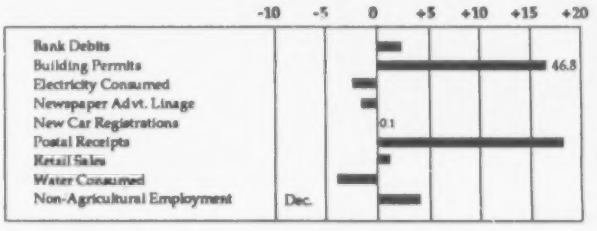
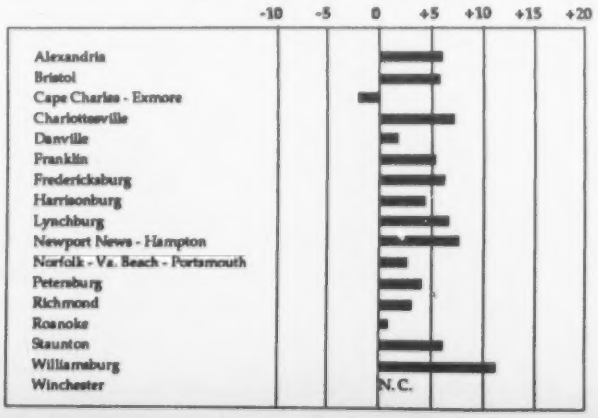


Chart II

City Indices

Percentage Change January, 1989 from January, 1988



Reducing Information Overload

Patricia A. Harvey, MBA
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In Douglas Adam's popular science fiction trilogy, The Hitchhiker's Guide to the Galaxy, science has discovered the Ultimate Answer—42. Unfortunately, no one knows the question!

While the resultant intergalactic quest is entertaining for Adam's readers, searching for the "Ultimate Question" in reality can be the exact opposite—particularly in today's information-driven society, where personal computing has given users almost unlimited access to a wide variety of information (usually in the form of raw data).

Accumulating data/information, however, is a lot like eating peanuts—once you start, it is hard to stop. This propensity to collect TOO MUCH information can result in **information overload**, which roughly translates to "I know I've got the answer somewhere, but what's the question?"

Since one of the Bureau's primary functions is collecting and disseminating data/information, numerous requests are received from managers at all levels who are trying to cope with information overload. Their requests have a common thread—the desire to match the right question with the right (or most appropriate) answer.

With that in mind, here are some questions and answers (derived from Bureau requests) that might help reduce your information overload.

"What is the Consumer Price Index?"

Economic activity in the United States is generally measured in dollar figures and, as such, is sensitive to price changes. In order to track these changes, price indices have been developed by statisticians and economists, combining the prices of many items through a weighting system reflecting the relative importance of these items in a base period. Principal indices are the Producer Price Index (describing trends in wholesale price levels), the International Price Indices (both export and import), and the Consumer Price Index (CPI).

The CPI is defined by the U.S. Department of Labor as "a measure of the average change in the prices paid by urban consumers for a fixed market basket of consumption goods and services ... comparing what the market basket of goods and services costs this month with what the same market basket cost a month, a year, or even 10 years ago." The index also includes all taxes directly associated with the purchase and use of these market basket items.

The "market basket" is based upon quantities purchased by consumers in a base period, and expenditure items are classified into approximately seven major groups and 250 categories. The following simplistic example of this breakdown (by group and category respectively) was extracted from U.S. Department of Labor Report 734, "Revising the Consumer Price Index". [Please note that investment items such as stocks, bonds, and real estate are NOT included in this basket.]

- Food (cookies, cereals, cheese, coffee, chicken)
- Housing (residential rent, fuel oil, soaps and detergents, local telephone service)
- Apparel and its upkeep (men's shirts, women's dresses, jewelry)
- Transportation (airline fares, new and used cars, gasoline, car insurance)
- Medical care (prescription drugs, eye care, physicians' services, hospital rooms)
- Entertainment (newspapers, sports vehicles, toys, admissions, musical instruments)
- Other (haircuts, bank fees, college tuition)

Prices are collected on a monthly basis from about 4,000 food stores, 24,000 rental units, and 28,000 other stores and service establishments (department stores, hospitals, filling stations, etc.) in 85 urban areas across the country.

In 1987 the CPI base year was changed from 1967 = 100 to 1982 = 100. Additionally, its entire structure was revised to more accurately reflect technological advances and changes in consumer buying habits. Rather than trying to convert from these old values using a formula, it is suggested that people use the new CPI values shown at Table III. CPI monthly figures can be obtained from various sources, including (but not limited to) the U.S. Department of Labor Monthly Labor Review, The Wall Street Journal, economic bulletin boards, and both public and college libraries.

"Is the Consumer Price Index a Cost-of-Living Index?"

When people talk about a cost-of-living index they are generally referring to a percentage change in prices over a period of time. However, a true cost-of-living index would also reflect the **substitutions** consumers would be willing to make in their buying or consumption habits when faced with relative price changes. [If the price of beef rose, consumers would be willing to substitute pork, poultry or fish in order to maintain (or often improve) their satisfaction levels.] As such, there is no true cost-of-living index.

Since the Consumer Price Index does measure price changes, it has been called and used as a cost-of-living index. However, the CPI is based on a market basket of **fixed** items in **fixed** proportions over a period of time and does not reflect consumer substitutions (nor does it take into account income and Social Security taxes since they are not associated with the prices of specific goods and services). For example, an increase of 10% in the CPI shows the cost of buying a base-period basket of goods and services has risen 10%. Thus, it costs more to buy the **same** quantities of the **same** goods. If that maintains consumer satisfaction levels, it can be said that the cost of meeting consumption needs has risen by 10%.

If a change in the CPI is viewed over a short period of time during which buying patterns will not change much, it would be appropriate to say the cost of living has risen

by about the percentage of the CPI change. However, over a longer period of time (such as several years) the CPI should be viewed as less indicative of the consumer's cost of living and more an upper limit of change.

"How can I figure an increase in the CPI between any two months?"

One of the easiest methods to determine increases or decreases between periods of time is to subtract the earlier period from the later period, divide that amount by the index for the earlier month, and then multiply by 100 to get the percent. For example, given December 1987 = 110.5 and December 1988 = 115.4, a 4.4% increase was determined using:

$$115.4 - 110.5 = 4.9$$
$$4.9/110.5 = .044 \times 100 = 4.4\%$$

Searching for the right answer can be a full-time job, especially since there is no "Ultimate Answer" to solve the multitude of problems faced by businesses today. However, by taking the time to research, develop, and ask the right question(s), managers can learn to avoid the pitfall of information overload, creating instead the "Ultimate Information".

SELECTED BUSINESS AND ECONOMIC INDICATORS FOR 17 CITIES

TABLE I January, 1989 — Monthly Index Number Comparisons of Current Month to Same Month in Base Period (1977) - Base Period = 100

CITY	CITY INDEX*	BANK DEBITS	BUILDING PERMITS	ELECTRICITY CONSUMED	NEWS-PAPER ADV. LINAGE	NEW CAR REGIS-TRATIONS	DECEMBER NON-AGRI-CULTURAL EMPLOYMENT #	WATER CONSUMED	SAMPLE RETAIL SALES †	POSTAL RECEIPTS
The State		401.9	184.5	186.2	54.3	136.4	149.9	87.6	130.3	445.8
Alexandria	146.3	572.3	573.2	218.6	N.A.	115.3	207.0	102.2	127.0	N.A.
Bristol	133.4	N.A.	99.5	140.6	54.2	102.1	120.1	98.7	117.4	334.6
Cape Charles - Exmore	135.1	N.A.	525.7	157.6	N.A.	82.9	N.A.	N.A.	112.9	231.2
Charlottesville	188.8	55.5	396.5	170.5	N.A.	110.2	117.5	129.6	188.6	417.0
Danville	140.1	N.A.	75.6	116.0	86.0	93.7	104.7	76.3	N.A.	364.1
Franklin	139.6	N.A.	64.9	156.3	114.7	118.0	N.A.	89.0	101.3	335.0
Fredericksburg	152.5	253.9	187.9	N.A.	140.3	171.7	N.A.	88.4	171.6	N.A.
Harrisonburg	153.5	324.1	1264.9	N.A.	97.4	81.2	N.A.	142.8	137.0	342.1
Lynchburg	317.0	473.0	139.0	158.7	N.A.	89.9	101.0	109.1	176.8	1546.7
Newport News - Hampton	149.4	N.A.	267.2	150.8	N.A.	83.8	144.5	104.8	187.3	N.A.
Norfolk - Va. Beach - Portsmouth	164.8	511.4	198.5	198.2		94.1		79.3	212.4	N.A.
Petersburg	146.5	108.1	205.5	N.A.	N.A.	57.7	137.9	115.9	144.3	280.9
Richmond	148.3	411.9	203.9	205.4	101.5	96.3		103.4	108.6	364.3
Roanoke	139.2	435.1	131.2	136.3	119.0	60.2	126.3	104.9	91.5	431.7
Staunton	113.0	168.5	120.8	N.A.	75.3	76.8	N.A.	N.A.	137.7	N.A.
Williamsburg	180.4	202.6	242.3	208.2	N.A.	146.6	N.A.	82.0	95.8	358.1
Winchester	N.C.	413.7	108.2	150.0	186.4	124.3	N.A.	N.A.	N.A.	N.A.

TABLE II January, 1989 — Percentage Change from Same Month Last Year.

CITY	CITY INDEX*	BANK DEBITS	BUILDING PERMITS	ELECTRICITY CONSUMED	NEWS-PAPER ADV. LINAGE	NEW CAR REGIS-TRATIONS	DECEMBER NON-AGRI-CULTURAL EMPLOYMENT #	WATER CONSUMED	SAMPLE RETAIL SALES †	DECEMBER TOTAL RETAIL SALES ‡
The State		2.4	46.8	-2.3	-1.6	0.1	4.0	-4.0	1.7	29.6
Alexandria	6.3	20.7	22.1	-1.8	N.A.	0.4	5.7	19.7	-2.9	34.9
Bristol	5.6	N.A.	16.4	2.5	1.3	48.5	4.1	-15.7	-1.2	15.3
Cape Charles - Exmore	-2.2	N.A.	75.3	0.0	N.A.	21.4	N.A.	-26.4	-7.3	11.4
Charlottesville	6.9	-18.8	41.8	-3.1	N.A.	3.7	1.8	13.0	5.3	24.2
Danville	2.1	N.A.	41.2	-3.0	-8.3	10.3	2.7	-11.7	N.A.	22.5
Franklin	5.1	N.A.	-71.8	-8.9	4.0	28.8	N.A.	-1.0	-0.9	20.5
Fredericksburg	6.0	24.8	34.4	N.A.	7.0	4.4	N.A.	14.8	-3.1	25.2
Harrisonburg	4.3	30.0	365.6	N.A.	-4.5	-10.1	N.A.	3.3	5.0	26.3
Lynchburg	6.3	14.0	108.3	5.9	N.A.	-12.4	1.3	18.7	0.6	35.4
Newport News - Hampton	6.8	N.A.	-13.7	-3.4	N.A.	8.2	0.9	-7.2	10.0	27.9
Norfolk - Va. Beach - Portsmouth	2.6	-1.1	50.6	-6.3		4.8		-10.2	1.9	25.5
Petersburg	3.9	-44.7	-55.4	N.A.	N.A.	-29.2	1.9	-17.7	7.4	50.1
Richmond	3.0	-0.8	61.8	-2.6	0.9	-14.8		-2.0	2.7	35.3
Roanoke	0.9	21.5	229.9	2.6	-6.9	0.0	0.3	-4.4	-0.6	18.2
Staunton	6.1	21.2	268.4	N.A.	2.8	-5.0	N.A.	N.A.	13.6	-2.2
Williamsburg	11.9	33.1	2328.5	-2.5	N.A.	23.8	N.A.	0.6	8.2	36.8
Winchester	N.C.	17.8	321.0	-0.3	3.6	3.0	N.A.	N.A.	N.A.	40.9

* Computation of City Index is based upon a weighted arithmetic mean of all business and economic components listed except Building Permits and Bank Debits, which are excluded because of their highly erratic nature.
# Virginia Employment Commission data which lags behind current reports.
† Preliminary data based on a survey sample.
‡ Total sales based on sales tax information which lags behind current reports.
⊐ Only total MSA data are available for these areas.

N.A. – Not Available
0.0. – No Change
N.C.—Not Comparable

TABLE III

Consumer Price Index

Year	January	February	March	April	May	June	July	August	September	October	November	December	Yearly Average	Percent Change Dec.-Dec.
1979	68.3	69.1	69.8	70.6	71.5	72.3	73.1	73.8	74.6	75.2	75.9	76.7	72.6	13.3%
1980	77.8	78.9	80.1	81.0	81.8	82.7	82.7	83.3	84.0	84.8	85.5	86.3	82.4	12.5%
1981	87.0	87.9	88.5	89.1	89.8	90.6	91.6	92.3	93.2	93.4	93.7	94.0	90.9	8.9%
1982	94.3	94.6	94.5	94.9	96.8	97.0	97.3	97.7	97.9	98.2	98.0	97.8	96.5	3.8%
1983	97.8	97.9	97.9	98.6	99.2	99.5	99.9	100.2	100.7	101.0	101.2	101.3	99.6	3.8%
1984	101.9	102.4	102.6	103.1	103.4	103.7	104.1	104.5	105.0	105.3	105.3	105.3	103.9	3.9%
1985	105.5	106.0	106.4	106.9	107.3	107.6	107.8	108.0	108.3	108.7	109.0	109.3	107.6	3.8%
1986	109.6	109.3	109.5	109.8	109.6	109.5	109.5	109.7	110.2	110.3	110.4	110.5	109.6	1.1%
1987	111.2	111.8	112.1	112.7	113.1	113.5	113.8	114.4	115.0	115.3	115.4	115.4	113.6	4.4%
1988	115.7	116.0	116.5	117.1	117.5	118.0	118.5	119.0	119.8	120.2	120.3	120.5	118.3	4.4%

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Roy L. Pearson, Director, Bureau of Business Research
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VIRGINIA BUSINESS REPORT

BUREAU OF BUSINESS RESEARCH, SCHOOL OF BUSINESS ADMINISTRATION
THE COLLEGE OF WILLIAM AND MARY, WILLIAMSBURG, VIRGINIA

Report No. 341 March, 1989

Business in Virginia February, 1989 Data

The economic indicators regularly reported by the Bureau in Tables II and III consist of seven indicators for which last month's (in this instance February's) figures are available plus two lagged indicators, nonagricultural employment and taxable retail sales, for which the latest data are for the month before last.

The seven most current indicators serve as preliminary signals of the economic pace for the past month. The two lagged variables, the number of payroll jobs and Virginian's retail spending, are broad economic measures regarded as coincident indicators. These coincident indicators move with as well as represent major elements of the general level of economic activity in Virginia. Their role in our Bureau report is to expand the information available about the economy two months back and give a broader base for judging the prior and current strength of the Virginia economy. Thus in this issue we offer seven economic indicators as initial signs of the state's economic activity in February, plus two indicators that supplement and confirm our initial impression in the last issue that January was a strong month.

Given that prologue, we now can turn to the February data. All seven of the economic indicators which serve as early signals declined statewide in February. Such a drop does not indicate that a recession (we will use the taboo word) has begun in Virginia. Several months of declining activity, confirmed by a decrease in employment, are the minimal conditions for acknowledging that a recession is in progress.

However, it is unusual and startling for all seven of the most recent indicators to show declines from the same month in the preceding year. Two forces that played a major role in the decreases were the weather and the calendar. January's unusually warm and clear weather boosted economic activity, especially construction, in that month. Then the true winter weather of February, with record snowstorms in some parts of the state, sent many types of activity plummeting. For example, tourism literally was stopped in its tracks for part of the month.

The calendar also was a force because our production and sales data are for the month, not per trading day. February of 1988 was a leap year month, with an extra business day compared to this February. Several of this February's statewide decreases were marginal, such as building permits, off 1.6%; newspaper advertising, down 1.7%; and sales per store by our retail sample, -0.6%. Thus the calendar difference alone could have been sufficient to push them into the negative range.

Our initial assessment is we should blame the weather and the calendar for creating one month of very soft economic activity. The evidence from prior months points to strong upward momentum with no signs of reversing, so February stands as the one-month exception to a pattern of steady growth.

A few comments on the individual series are appropriate. Building permits were expected to fall in February, following January's 184.5% explosion. Given the weather-related swings in activity, the fact that building permits only fell 1.6% in February actually is good news.

Chart I

Nine Selected Business & Economic Indicators Percentage Change

Percentage Change February, 1989 from February, 1988

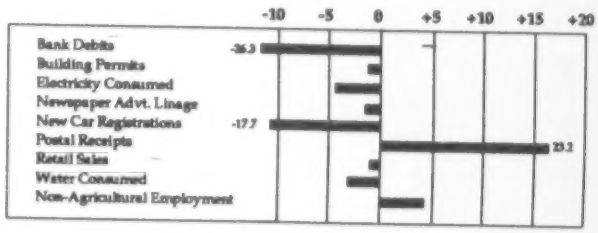
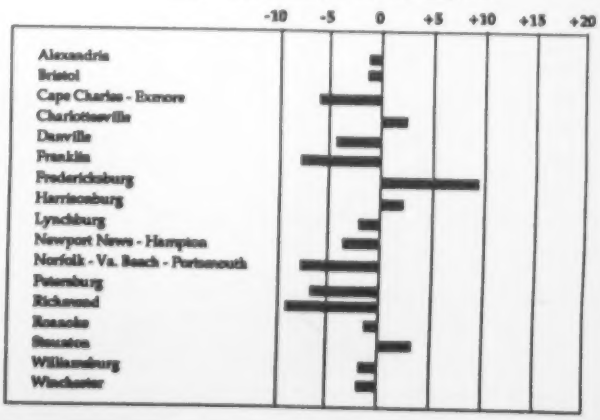


Chart II

City Indices

Percentage Change February, 1989 from February, 1988



SELECTED BUSINESS AND ECONOMIC INDICATORS FOR 17 CITIES

TABLE I February, 1988

Monthly Index Number Comparisons of Current Month to Same Month in Base Period (1977) - Base Period = 100

CITY	CITY INDEX*	BANK DEBITS	BUILDING PERMITS	ELECTRICITY CONSUMED	NEWS-PAPER ADV. LINAGE	NEW CAR REGIS-TRATIONS	JANUARY NON-AGRI-CULTURAL EMPLOYMENT #	WATER CONSUMED	SAMPLE RETAIL SALES †	POSTAL RECEIPTS
The State		268.0	161.7	171.6	91.7	121.1	147.0	81.1	186.9	485.2
Alexandria	141.0	457.7	499.4	200.0	N.A.	104.7	204.5	88.9	130.4	N.A.
Bristol	132.5	N.A.	82.5	131.3	86.2	74.1	118.4	93.8	127.2	329.4
Cape Charles - Exmore	116.2	N.A.	252.4	147.7	N.A.	78.9	N.A.	N.A.	89.4	202.2
Charlottesville	189.7	142.8	82.6	161.8	N.A.	99.3	115.1	122.9	206.2	400.2
Danville	119.4	N.A.	224.9	113.9	91.7	64.0	103.7	73.7	N.A.	272.5
Franklin	122.5	N.A.	168.9	152.1	113.0	88.5	N.A.	89.0	93.4	258.9
Fredericksburg	336.5	241.2	63.2	N.A.	148.3	183.4	N.A.	80.8	148.9	1725.8
Harrisonburg	160.7	336.6	759.0	N.A.	118.0	66.7	N.A.	129.3	151.9	354.9
Lynchburg	284.4	397.2	258.1	137.6	N.A.	79.7	98.6	115.7	176.8	1316.3
Newport News - Hampton	112.1	N.A.	268.1	142.5	86.2	88.2	140.5	98.2	158.3	N.A.
Norfolk - Va. Beach - Portsmouth	161.8	403.0	148.9	184.6	N.A.	87.2		73.7	240.6	N.A.
Petersburg	153.2	89.2	65.8	N.A.		41.9	135.1	105.3	158.6	313.6
Richmond	150.3	265.9	149.8	188.3	100.2	92.1		94.0	110.3	412.2
Roanoke	159.9	346.0	131.8	123.2	129.8	89.3	124.6	95.0	155.9	429.1
Staunton	143.0	133.2	440.2	N.A.	73.8	94.3	N.A.	N.A.	155.9	251.9
Williamsburg	158.4	144.1	353.8	191.7	N.A.	112.7	N.A.	78.8	108.7	402.0
Winchester	156.1	383.5	143.1	182.7	192.0	113.6	N.A.	N.A.	N.A.	N.A.

TABLE II February, 1988

Percentage Change from Same Month Last Year.

CITY	CITY INDEX*	BANK DEBITS	BUILDING PERMITS	ELECTRICITY CONSUMED	NEWS-PAPER ADV. LINAGE	NEW CAR REGIS-TRATIONS	JANUARY NON-AGRI-CULTURAL EMPLOYMENT #	WATER CONSUMED	SAMPLE RETAIL SALES †	JANUARY TOTAL RETAIL SALES ‡
The State		-26.3	-1.8	-4.6	-1.7	-17.7	4.5	-3.2	-0.6	0.5
Alexandria	-1.4	3.9	-20.7	-3.2	N.A.	-11.3	6.2	1.8	-3.1	4.8
Bristol	-1.4	N.A.	800.5	-9.1	-1.7	-20.5	3.2	-11.3	7.5	4.6
Cape Charles - Exmore	-5.9	N.A.	-12.6	-5.6	N.A.	-13.4	N.A.	-25.0	-4.4	15.8
Charlottesville	2.6	-11.2	-66.6	-3.7	N.A.	-13.7	3.7	9.0	9.5	-3.1
Danville	-4.4	N.A.	53.7	-2.1	-6.6	-10.7	3.7	-2.2	N.A.	-8.5
Franklin	-7.2	N.A.	-10.5	-0.3	9.4	-12.9	N.A.	0.0	-10.8	-21.5
Fredericksburg	9.5	20.4	-36.9	N.A.	0.3	4.1	N.A.	11.2	14.8	8.5
Harrisonburg	2.4	21.4	148.7	N.A.	-5.4	-27.1	N.A.	-10.6	17.8	6.9
Lynchburg	-2.0	11.5	114.8	-10.8	N.A.	-10.7	1.0	9.3	1.2	-8.7
Newport News - Hampton	-3.9	N.A.	59.8	-3.3	5.5	-20.4	1.4	-4.5	-2.5	0.8
Norfolk - Va. Beach - Portsmouth	-7.6	-24.3	-15.1	-5.5		-22.0		-7.9	-9.0	-5.9
Petersburg	-8.3	-63.6	-9.9	N.A.	N.A.	-44.1	2.7	8.2	0.8	-8.8
Richmond	-9.6	-27.7	43.0	-4.7	-16.3	-20.2		-3.1	-3.7	-30.8
Roanoke	-1.5	-4.6	-39.9	-6.6	1.2	-2.8	1.4	-4.4	0.9	-5.2
Staunton	3.8	-2.8	171.1	N.A.	-2.2	-34.1	N.A.	N.A.	13.4	16.8
Williamsburg	-1.7	-1.6	-2.0	-4.9	N.A.	-26.5	N.A.	4.4	5.2	-0.8
Winchester	-1.7	7.8	173.3	1.7	2.8	-13.5	N.A.	N.A.	N.A.	2.4

TABLE III February, 1988

Percentage Change January - February from Same Period Last Year.

CITY	CITY INDEX*	BANK DEBITS	BUILDING PERMITS	ELECTRICITY CONSUMED	NEWS-PAPER ADV. LINAGE	NEW CAR REGIS-TRATIONS	JAN. - DEC. 1988 NON-AGRI-CULTURAL EMPLOYMENT #	WATER CONSUMED	SAMPLE RETAIL SALES †	JAN. - DEC., 1988 TOTAL RETAIL SALES ‡
The State		-11.9	19.4	-3.4	-1.7	-9.1	3.7	-3.8	0.5	6.6
Alexandria	0.5	12.6	-2.4	-2.5	N.A.	-5.5	5.3	10.7	-2.9	4.4
Bristol	0.6	N.A.	71.8	-3.4	-0.4	6.8	3.2	-13.6	3.1	1.1
Cape Charles - Exmore	-6.4	N.A.	32.2	-2.8	N.A.	1.5	N.A.	-25.7	-5.9	0.1
Charlottesville	4.1	-13.5	-9.1	-3.4	N.A.	-5.4	2.5	11.0	7.5	5.8
Danville	0.2	N.A.	50.3	-2.6	-7.5	0.7	2.7	-7.3	N.A.	15.1
Franklin	-3.2	N.A.	-43.9	-4.8	1.6	6.8	N.A.	-0.5	-5.8	-11.5
Fredericksburg	6.2	22.6	-0.2	N.A.	3.4	4.2	N.A.	13.1	5.3	6.5
Harrisonburg	2.1	25.5	257.8	N.A.	-5.0	-18.6	N.A.	-3.6	11.1	8.8
Lynchburg	0.8	12.8	112.7	-2.6	N.A.	-11.6	0.8	13.7	0.9	3.0
Newport News - Hampton	4.7	N.A.	7.6	-3.3	5.5	-7.6	2.1	43.1	3.1	0.8
Norfolk - Va. Beach - Portsmouth	-4.9	-12.8	13.1	-6.2		-10.1		-9.2	-4.1	1.0
Petersburg	-4.2	-55.2	-49.2	N.A.	N.A.	-36.3	3.0	-7.8	3.8	3.2
Richmond	-2.2	-14.1	53.3	-3.6	-0.1	-17.5		-2.5	-0.7	6.3
Roanoke	-0.2	8.4	1.4	-1.9	-2.9	-1.5	1.2	-4.4	0.2	7.3
Staunton	2.1	9.3	190.0	N.A.	0.2	-20.9	N.A.	N.A.	13.5	-7.5
Williamsburg	2.6	16.1	60.6	-3.6	N.A.	-4.7	N.A.	2.4	4.5	10.3
Winchester	2.7	12.8	222.0	0.7	3.2	-5.6	N.A.	N.A.	N.A.	12.6

* Computation of City Index is based upon a weighted arithmetic mean of all business and economic components listed except Building Permits and Bank Debits, which are excluded because of their highly erratic nature.
\# Virginia Employment Commission data which lags behind current reports.
† Preliminary data based on a survey sample.
‡ Total sales based on sales tax information which lags behind current reports.
⊃ Only total MSA data are available for these areas.

N.A. - Not Available
0.0 - No Change

For five of the seven indicators, declines did not occur broadly across the state. Most of the seventeen urban areas we cover shared decreases for only two variables, new car sales and electricity consumed. New car registrations retreated 17.7% statewide in February, and 16 of our 17 areas experienced a drop. Only Fredericksburg reported an increase, up 4.1%. New cars definitely were in less demand last month, explaining why the buyer incentive programs are back.

Electricity consumption fell 4.6% in February, and 12 of the 13 areas for which we have data experienced a decline. Given the wintery weather, our assumption is the decrease in consumption represents a lower level of business activity—widespread, but temporary.

In sum, negative moves by a whole set of economic indicators, even if most of the moves are small, get one's attention. The February declines were broad across types of economic activity, but generally not across geographic areas. Temporary forces seem to have been the cause, pointing to a one-month deviation from the recent pattern of growth. March, with its early Easter, should give a quite different picture, especially in consumer-related sectors. RLP

Nonagricultural Employment Growth in Virginia, 1988

The annual benchmark revision of the Virginia Employment Commission's nonagricultural employment data has been released, providing updated estimates of 1987 and 1988 payroll employment. The data include the nonagricultural employment levels for the state and its eight Metropolitan Statistical Areas (MSAs) by industry category. As in past years, the Bureau has constructed two tables to track Virginia's performance, overall and in nine industry groups. Geographically, the tables cover the state, the nonmetropolitan areas, the sum of the MSAs, and each individual MSA. Table IV shows the 1988 nonagricultural employment levels and Table V provides the 1987-1988 growth rates in percentages.

Total nonagricultural employment in 1988 grew by 3.7%, a clear deceleration from the revised 4.8% reported for 1987. The slower job growth still meant a lot of new payroll jobs were created, 100.2 thousand.

The slowing pace of job growth occurred in 7 of the 9 industry groups covered in Table V. The two exceptions were durable goods manufacturing, with a 1988 growth rate of 1.5% versus a 0.7% rate in 1987; and state and local government, rising 3.6% in 1988, up from 2.3% in 1987.

Among the 7 industry groups with less growth, 6 groups did experience increases in jobs in 1988. Only nondurable goods manufacturing lost employees last year, a decline of 2.0% or 4,600 jobs. Not a big loss, out of 2,780,600 total nonagricultural payroll employment, and the decreases were widely dispersed: 6 of the 8 metropolitan areas incurred losses, and the other two (Bristol and Charlottesville) had no change. Furthermore, the job loss was equally divided between the metropolitan and nonmetro areas, minus 2,300 in each. Nevertheless, the decrease is important to the state. Any drop in manufacturing employment represents a pullback in a basic industry, one that brings in income from outside of Virginia. Plus the cutback in one particular industry, textile mill products, was 2,300 or one-half of the total decline, indicating the adjustments in this industry still are continuing.

Focusing on the job gains, the leading sectors remain private services and trade. New trade and private sector service jobs added 66,000 employees to Virginia payrolls, two-thirds of the overall increase. The private services companies added a net of 42,400 payroll employees, a 6.8% increase. Wholesale and retail jobs rose by 23,600, up 3.9% from 1987. For comparison, the 1987 growth rates were 8.1% for services and 5.4% for the trade sector, so the increases in these sectors definitely are moderating.

NONAGRICULTURAL EMPLOYMENT IN VIRGINIA

TABLE IV

Average Employment in Thousands, 1988

Area	Total Nonagricultural Employment	Durable Goods Manufacturing	Nondurable Goods Manufacturing	Construction	Transportation and Public Utilities	Wholesale and Retail Trade	Finance, Insurance and Real Estate	Services	Federal Government	State and Local Government
The State	2780.6	205.7	221.6	195.1	145.6	633.8	150.4	668.5	171.0	373.1
Nonmetro Areas	685.2	72.6	109.8	48.8	27.4	139.9	17.6	131.6	22.2	101.0
Sum of SMSAs	2095.4	133.1	111.8	146.3	118.2	493.9	132.8	536.9	148.8	272.1
Northern Va.	743.5	21.4	13.9	59.8	52.7	164.5	48.9	240.3	71.3	70.3
Bristol	32.0	6.5	4.3	0.9	1.1	8.2	1.2	4.6	0.5	4.7
Charlottesville	66.8	5.7	3.0	3.9	2.3	13.1	3.4	12.7	1.3	21.4
Danville	41.5	3.4	13.3	2.1	1.0	9.2	1.3	8.1	0.3	4.8
Lynchburg	71.8	14.9	8.0	3.8	2.6	16.2	3.9	13.3	0.5	8.8
Hampton Rds.	565.1	50.2	17.8	38.1	26.5	140.1	27.0	135.8	54.8	74.8
Richmond/Petersburg	452.1	19.0	43.6	30.1	23.6	108.9	38.8	95.0	16.8	75.2
Roanoke	122.6	12.0	7.9	7.8	8.4	33.7	8.3	29.1	3.3	12.1

TABLE V

Employment Percentage Changes, 1987-1988

Area	Total Nonagricultural Employment	Durable Goods Manufacturing	Nondurable Goods Manufacturing	Construction	Transportation and Public Utilities	Wholesale and Retail Trade	Finance, Insurance and Real Estate	Services	Federal Government	State and Local Government
The State	3.7%	1.5%	-2.0%	6.7%	2.1%	3.9%	4.7%	6.8%	0.4%	3.6%
Nonmetro Areas	4.9%	1.0%	-2.1%	9.7%	-3.2%	8.1%	7.3%	13.4%	12.1%	3.5%
Sum of SMSAs	3.3%	1.6%	-2.0%	5.7%	3.4%	3.3%	4.4%	5.3%	-1.1%	3.7%
Northern Va.	5.3%	0.0%	-1.4%	12.8%	7.8%	3.1%	6.1%	7.5%	-2.2%	6.2%
Bristol	3.2%	12.1%	0.0%	0.0%	0.0%	5.1%	0.0%	0.0%	0.0%	0.0%
Charlottesville	2.5%	0.0%	0.0%	8.3%	4.5%	0.8%	0.0%	8.7%	0.0%	2.4%
Danville	2.7%	6.3%	-3.6%	23.5%	0.0%	8.2%	8.3%	3.4%	0.0%	0.0%
Lynchburg	0.8%	-3.2%	-4.8%	5.9%	-10.3%	11.0%	5.4%	-0.7%	0.0%	0.0%
Hampton Rds.	2.1%	2.7%	-4.8%	-3.3%	1.1%	2.9%	0.7%	4.7%	-0.5%	3.5%
Richmond/Petersburg	3.0%	2.7%	-0.5%	4.5%	2.2%	3.6%	5.7%	2.2%	1.2%	3.9%
Roanoke	1.2%	0.8%	-1.3%	2.6%	-5.8%	0.6%	2.5%	4.3%	0.0%	1.7%

Construction gains continued at a strong pace, up 6.7%, another 12,200 workers in 1988, bringing the level for the year to 195,100. For perspective, in 1982 there were only 103,800 construction jobs in Virginia. Boom is too mild a word to describe the continuing incredibly high pace of building in Virginia.

The eight metropolitan statistical areas (MSAs) in Virginia still accounted for the bulk of the job growth in 1988, measured in number of people. The MSAs added 67,900 new payroll jobs, compared to 32,300 in the nonmetropolitan areas of the state. However the overall growth rate in percentage terms for the 8 MSAs was only 3.3%, down 2 percentage points from last year's 5.3%. Meanwhile the percentage gain in nonmetropolitan Virginia was 4.9%, up from the 3.4% rise in 1987. A major reason is private service sector jobs are now increasing quite rapidly in the nonurban areas, up 13.4% in 1988 and accounting for almost one-half of the new jobs in those areas. In general, much of Virginia's current strength lies outside of the major metropolitan areas, worth bearing in mind since the MSAs are the main topic of most monthly data releases.

Among the 8 MSAs, 7 of the 8 experienced slower rates of job growth in 1988 than in 1987. The only exception was the Virginia portion of the Bristol MSA, with 1988 payroll job growth of 3.2% versus 3.0% in 1987. The Northern Virginia MSA retained its position as the state's urban growth leader with a 5.3% advance for 1988; but the increase in 1987 was 7.2%, almost 2 points higher. Four of our MSAs experienced declines of 2 percentage points or more in their job growth: the Richmond-Petersburg MSA rate fell 2.3 percentage points, from 5.3% in 1987 to 3.0% in 1988; in the Charlottesville MSA, the drop was 2.2%, from 4.7% in 1987 to 2.5% in 1988; Hampton Roads, down 2.0% from 4.1% to 2.1%; and the Roanoke MSA , also down 2.0% from a 3.2% rise in 1987 to only 1.2% for 1988. Danville and Lynchburg had more modest slowdowns in their growth rates, 1.1% and 0.3% respectively.

In retrospect, 1988 as expected was a year of decelerating payroll job growth, with the major metropolitan areas moving to slower, more sustainable rates of growth. The Northern Virginia growth rate of 5.3% was the only MSA rate above 3.2%. Nonagricultural employment growth will continue to slow in 1989, to a statewide rate of 3.0%. A more modest increase, but still an addition of 84,000 net new payroll jobs. RLP

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VIRGINIA BUSINESS REPORT

BUREAU OF BUSINESS RESEARCH, SCHOOL OF BUSINESS ADMINISTRATION
THE COLLEGE OF WILLIAM AND MARY, WILLIAMSBURG, VIRGINIA

Report No. 342 April, 1989

Business in Virginia March, 1989 Data

The unusual negative consensus displayed by our statewide economic indicators in February appeared at the time to be the product of bad weather and the calender, not the initial step in a general economic decline. That judgment has been confirmed by the Virginia data now available.

The two series we report with a lag—nonagricultural employment and total retail sales—both recorded good gains for February. Payroll jobs rose 4.5 percent over February 1988, the same year-to-year growth rate experienced in January. Therefore statewide job growth in 1989 has remained strong, above the average rate for 1988 (3.7 percent). No sign of impending layoffs—quite the opposite, with many jobs going unfilled.

Total retail sales also advanced strongly in February, up 6.4 percent statewide. A welcome rebound from the flat January sales, and evidence that the weakness seen initially for February among our sample of general retail stores was not experienced by all types of retailers. However, Virginia's 6.4 percent statewide retail sales gain was a full point below the national February-to-February rise of 7.4 percent in total retail sales excluding the automobile group (a measure that roughly approximates Virginia's taxable retail sales). Our consumers still are not upping their retail spending in 1989 as freely as their national counterparts—perhaps partly because they are still paying for their surprisingly strong splurge in December.

The March retail report by our sample of stores echoes the February general retail results just described. Our sample had a 5.0 percent year-to-year gain in March. That is a percentage point less than the national increase of 6.0 percent for retail sales other than autos. Remember though our sample data indicate the average dollar sales receipts per existing store, not total sales by all stores, new and old. Thus in reality our per store rise of 5.0 percent probably indicates a general retail gain in Virginia in March at least equal to the national one.

An early Easter apparently boosted general retail trade in all parts of the Commonwealth. Among our sample of stores only those in Petersburg reported a decline, down a slight 0.7 percent.

Among our seven March indicators, four showed gains for the month. In addition to the increase for our sample of retailers, bank debits were up 3.5 percent; electricity consumed, +11.9 percent; and its partner in business activity, water consumed, advanced 3.7 percent.

The seasonally higher demand for such goods as apparel, gifts, and travel did not extend to automobiles. New car registrations across the state fell 20.9 percent in March compared to the same month last year. Fourteen of our seventeen urban areas reported double-digit declines, ranging as high as 39 percent; two had drops of 7 to 9 percent; and only one, Franklin, realized an increase. That dismal demand for new cars in March follows a 17.7 percent statewide plunge in February, and the cumulative first quarter drop has been 13.5 percent. Incentives now are back at most dealerships, and they are pushing hard to get us to at least look at the cars available—that may restrain the slide in the next few months. But 1989 is well on its way to being a year of lower automobile demand.

Even that cloud has a brighter side. Do not look for Virginians to save all of what they might have used as a downpayment on a new car. Instead they will spend most of these discretionary funds, and a likely prospect is more spend-

Chart I

Nine Selected Business & Economic Indicators Percentage Change

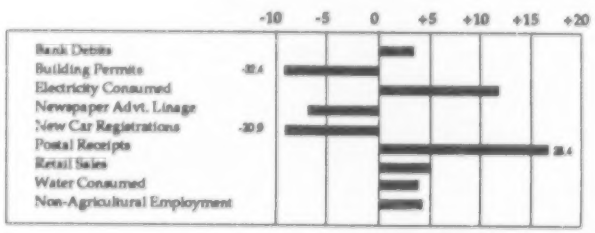
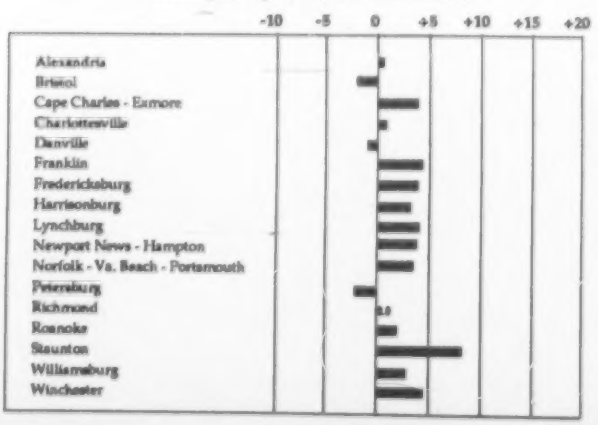


Chart II

City Indices



-ing for recreation and travel, active sources of personal pleasure. That may boost our tourist-related enterprises in late spring and summer.

The building permit decline of 22.4 percent in March builds on the slight drop of 1.7 percent in February. The cumulative first quarter result still is positive, but only 1.7 percent in current dollars. Building plans in real (inflation-adjusted) terms are being cut back in some parts of the Commonwealth, and that may spread to other areas as the year progresses. For now, though, the pattern around the state varies widely, from huge increases in planned construction to large declines.

The available March and cumulative first quarter economic signals in Virginia are generally positive around the state for general retail trade, power, water, and overall spending (bank debits); consistently negative for new car demand; and mixed to negative regarding building plans. The negatives are not sufficient to raise concern about an impending recession—for now the current data point towards steady growth in the Commonwealth. RLP

Federal Confirmation of Virginia's Superior Economic Performance

On April 20 the Bureau of Economic Analysis in the U.S. Department of Commerce released their estimates of state personal income for the fourth quarter of 1988. They also released preliminary 1988 annual values, calculated as the average of the four quarterly estimates. Revisions based on more complete data will be forthcoming in the fall; but the preliminary estimates give us a clear view of where we stand, especially relative to other states.

First we will give some highlights of Virginia's performance, then we will review the national rankings.

Virginia experienced steady income growth in the fourth quarter of 1988 (1988:4), an 8.5 percent rise in total resident personal income compared to 1987:4. Four industry sectors recorded double-digit earnings increases, fourth quarter to fourth quarter: finance, insurance, and real estate, (FIRE), up 12.7 percent; wholesale trade, gaining 12.0 percent; and construction, continuing its strong performance with an 11.0 percent increase. Only one sector, mining, suffered a decline, down 4.8 percent from 1987:4 to 1988:4.

Virginia's strong fourth quarter income growth put the annual figures right on target. The annual average for Virginia personal income in 1988 reached $105.77 billion, in line with our November estimate of $105.8 billion. Virginia did indeed pass the hundred billion mark in 1988. We did so with an annual growth rate, 1987-1988, of 8.5 percent in total personal income (identical to our fourth quarter to fourth quarter rate).

For the calender year the sectors with the highest growth rates generally were the same as in the fourth quarter, with one exception: farm earnings were the growth leader, posting a 19.0 percent gain for the year. That was followed by private services (+12.4 percent), FIRE (+10.9 percent), wholesale trade (+10.4 percent), and construction (+10.0 percent). On an annual basis all major industry sectors experienced rising dollar income. However some of the increases were small, below the inflation rate. Mining earnings edged up 3.3 percent; Federal military employ[illegible] receipts, 2.8 percent; and in nondurable goods manufacturing the gain was only 2.0 percent.

The general economic prosperity in Virginia has attracted many new residents from other states, boosting our population growth in recent years. The estimated 5,996,000 Virginians as of July 1, 1988 represented a 1.4 percent increase over 1987—down from the 2.0 percent growth rate in the previous year but still clearly above the national rate of 1.0 percent.

The net result of the high income growth and moderately slower population rise in 1988 was an increase in per capita income of 7.0 percent from 1987 to 1988. This brought the 1988 Virginia income per person to $17,640, seven percentage points or $1,196 above the national average of $16,444.

TABLE IV

RESIDENT PERSONAL INCOME AND POPULATION
TOP FOURTEEN STATES, 1988

PER CAPITA RESIDENT PERSONAL INCOME			TOTAL RESIDENT PERSONAL INCOME			TOTAL POPULATION AS OF JULY 1		
	DOLLARS 1988	AV. ANNUAL % CHANGE 1982 - 1988		MILLIONS OF DOLLARS 1988	AV. ANNUAL % CHANGE 1982 - 1988		THOUSANDS OF PERSONS	AV. ANNUAL % CHANGE 1982 - 1988
UNITED STATES	$16,444	6.2	UNITED STATES	$4,042,110	7.2	UNITED STATES	245,807	1.0
1 CONNECTICUT	$22,761	7.9	1 CALIFORNIA	$531,100	8.4	1 CALIFORNIA	28,168	1.9
2 NEW JERSEY	21,882	7.8	2 NEW YORK	345,425	7.5	2 NEW YORK	17,898	0.3
3 MASSACHUSETTS	20,701	8.4	3 TEXAS	245,663	5.4	3 TEXAS	16,780	0.0
4 ALASKA	19,514	2.0	4 FLORIDA	204,792	9.5	4 FLORIDA	12,377	2.9
5 MARYLAND	19,314	7.2	5 ILLINOIS	203,305	6.2	5 PENNSYLVANIA	12,027	0.7
6 NEW YORK	19,299	7.2	6 PENNSYLVANIA	194,459	6.1	6 ILLINOIS	11,544	-0.4
7 NEW HAMPSHIRE	19,016	8.6	7 NEW JERSEY	168,923	8.5	7 OHIO	10,872	0.8
8 CALIFORNIA	18,855	6.1	8 OHIO	168,344	6.1	8 MICHIGAN	9,300	1.0
9 DELAWARE	17,699	6.8	9 MICHIGAN	152,400	7.1	9 NEW JERSEY	7,720	0.6
10 VIRGINIA	17,640	7.2	10 MASSACHUSETTS	121,538	8.8	10 NORTH CAROLINA	6,526	1.8
11 ILLINOIS	17,611	6.1	11 VIRGINIA	105,774	8.8	11 GEORGIA	6,401	2.8
12 NEVADA	17,440	5.7	12 GEORGIA	95,887	9.4	12 VIRGINIA	5,996	1.4
13 HAWAII	16,898	6.2	13 NORTH CAROLINA	92,199	8.7	13 MASSACHUSETTS	5,871	0.2
14 RHODE ISLAND	16,793	7.0	14 MARYLAND	89,692	8.7	14 INDIANA	5,575	0.8

SELECTED BUSINESS AND ECONOMIC INDICATORS FOR 17 CITIES

TABLE I March, 1989

Monthly Index Number Comparisons of Current Month to Same Month in Base Period (1977) - Base Period = 100

CITY	CITY INDEX*	BANK DEBITS	BUILDING PERMITS	ELECTRICITY CONSUMED	NEWS-PAPER ADV. LINAGE	NEW CAR REGIS-TRATIONS	FEBRUARY NON-AGRI-CULTURAL EMPLOYMENT #	WATER CONSUMED	SAMPLE RETAIL SALES †	POSTAL RECEIPTS
The State		417.5	169.8	181.5	67.2	131.2	147.6	65.5	197.7	507.9
Alexandria	154.0	566.9	335.5	210.1	NA	118.1	205.6	86.3	152.7	NA
Bristol	180.2	NA	105.6	129.5	73.5	79.9	118.3	84.6	136.4	366.3
Cape Charles - Exmore	154.3	NA	816.8	159.1	NA	78.1	NA	NA	131.6	293.6
Charlottesville	189.8	136.1	479.2	164.9	NA	83.9	115.8	124.3	218.8	373.3
Danville	128.8	NA	178.6	118.0	121.1	80.8	103.2	78.5	NA	271.0
Franklin	150.8	NA	61.6	151.4	154.4	82.0	NA	82.3	148.7	290.0
Fredericksburg	415.0	256.5	190.3	NA	178.4	180.5	NA	87.1	177.0	1928.3
Harrisonburg	184.7	396.5	795.3	NA	164.0	76.9	NA	158.3	175.7	366.8
Lynchburg	332.6	137.0	225.2	150.6	NA	64.2	99.5	116.9	195.3	1643.3
Newport News - Hampton	123.7	NA	217.7	152.4	NA	60.0	141.1	113.5	133.0	NA
Norfolk - Va. Beach - Portsmouth	164.9	392.6	199.9	195.3		97.1		NA	210.7	NA
Petersburg	143.0	102.7	109.3	NA	NA	50.1	136.9	107.7	145.2	270.6
Richmond	159.6	482.7	151.5	201.8	118.1	90.9		107.1	119.2	400.9
Roanoke	175.4	368.4	44.1	130.9	180.0	66.1	124.4	106.4	182.5	423.2
Staunton	150.6	133.2	115.5	NA	96.5	72.7	NA	NA	139.3	316.2
Williamsburg	183.8	177.8	321.6	204.3	NA	117.8	NA	91.6	137.7	459.6
Winchester	123.0	452.9	399.7	159.0	95.8	114.2	NA	NA	NA	NA

TABLE II March, 1989

Percentage Change from Same Month Last Year.

CITY	CITY INDEX*	BANK DEBITS	BUILDING PERMITS	ELECTRICITY CONSUMED	NEWS-PAPER ADV. LINAGE	NEW CAR REGIS-TRATIONS	FEBRUARY NON-AGRI-CULTURAL EMPLOYMENT #	WATER CONSUMED	SAMPLE RETAIL SALES †	FEBRUARY TOTAL RETAIL SALES ‡
The State		3.5	-22.4	11.9	-6.9	-20.9	4.5	3.7	5.0	6.4
Alexandria	0.5	7.6	-24.9	14.6	NA	-18.0	6.2	-9.1	2.5	2.4
Bristol	-2.0	NA	53.9	-1.7	-5.9	-31.4	3.5	-13.4	6.2	12.4
Cape Charles - Exmore	3.8	NA	47.6	13.2	NA	-7.7	na	NA	6.8	-3.2
Charlottesville	0.8	32.2	153.4	10.7	NA	-35.6	3.0	4.1	4.4	11.0
Danville	-1.0	NA	-23.5	8.4	-13.8	-14.1	3.2	3.0	NA	7.2
Franklin	4.3	NA	-66.5	16.0	3.8	2.0	NA	-7.6	2.4	13.1
Fredericksburg	3.8	16.1	68.9	NA	1.2	-14.8	NA	13.5	8.7	0.4
Harrisonburg	3.2	47.8	59.1	NA	-7.4	-18.8	NA	10.6	7.9	14.3
Lynchburg	3.9	8.3	102.5	6.7	NA	-34.2	1.7	-2.8	3.5	15.4
Newport News - Hampton	3.7	NA	-61.2	11.3	NA	-36.2	1.2	8.1	10.0	14.9
Norfolk - Va. Beach - Portsmouth	3.6	-2.5	-28.6	10.0		-12.1		na	6.7	5.9
Petersburg	-2.1	-51.8	40.7	NA	NA	-39.1	3.3	10.9	-0.7	12.5
Richmond	0.0	15.0	13.7	14.7	-8.5	-28.0		5.4	2.5	5.6
Roanoke	2.2	0.7	-24.8	8.4	-7.5	-11.8	1.8	2.4	4.6	12.3
Staunton	8.2	1.9	-44.2	NA	-0.7	-24.7	NA	NA	20.3	13.9
Williamsburg	2.8	7.7	116.2	13.3	NA	-9.7	NA	2.7	5.2	-2.1
Winchester	4.7	12.9	473.6	8.7	4.5	-16.8	NA	NA	NA	22.3

TABLE III March, 1989

Percentage Change January - March from Same Period Last Year.

CITY	CITY INDEX*	BANK DEBITS	BUILDING PERMITS	ELECTRICITY CONSUMED	NEWS-PAPER ADV. LINAGE	NEW CAR REGIS-TRATIONS	JAN. - FEB. NON-AGRI-CULTURAL EMPLOYMENT #	WATER CONSUMED	SAMPLE RETAIL SALES †	JAN. - FEB. TOTAL RETAIL SALES ‡
The State		15.4	1.7	1.3	-3.4	-13.5	4.5	-1.8	2.2	3.8
Alexandria	0.1	10.8	-8.9	2.7	NA	-10.3	6.3	3.7	-1.7	3.3
Bristol	0.1	NA	64.2	-2.9	1.2	-8.0	3.5	-13.5	4.1	8.6
Cape Charles - Exmore	-3.8	NA	39.6	2.1	NA	-26.3	NA	NA	-1.3	5.5
Charlottesville	2.1	-22.2	33.8	0.9	NA	-16.6	1.1	8.6	6.3	4.2
Danville	-2.5	NA	10.6	0.9	-10.2	-4.9	3.2	-3.9	NA	-0.2
Franklin	-0.6	NA	-66.2	1.1	2.5	5.4	NA	-2.9	-2.6	-2.8
Fredericksburg	5.1	20.3	20.2	NA	2.5	-3.4	NA	13.2	8.7	3.1
Harrisonburg	2.6	33.0	164.6	NA	-8.0	-18.7	NA	1.0	10.3	10.8
Lynchburg	-0.2	11.3	109.1	0.4	NA	-19.3	1.6	7.5	1.4	3.7
Newport News - Hampton	5.3	NA	-28.3	1.2	NA	-18.0	1.4	31.6	5.8	8.5
Norfolk - Va. Beach - Portsmouth	-1.7	-17.1	-8.8	-2.6		-10.8		NA	-0.1	0.6
Petersburg	-4.1	-54.1	-37.7	NA	NA	-37.3	3.2	-2.4	1.9	2.0
Richmond	-2.6	-4.2	36.8	1.9	1.9	-21.2		0.2	0.6	-11.4
Roanoke	0.2	5.7	-3.4	3.3	-4.9	-5.2	1.5	-2.1	1.8	3.9
Staunton	6.9	6.9	68.9	NA	-0.1	-22.3	NA	NA	15.8	16.1
Williamsburg	1.6	13.1	78.5	1.5	NA	-6.3	NA	2.6	5.0	-1.5
Winchester	2.4	12.8	340.6	3.3	3.4	-9.5	NA	NA	NA	12.4

* Computation of City Index is based upon a weighted arithmetic mean of all business and economic components listed except Building Permits and Bank Debits, which are excluded because of their highly erratic nature.
\# Virginia Employment Commission data which lags behind current reports.
† Preliminary data based on a survey sample.
‡ Total sales based on sales tax information which lags behind current reports.
⊃ Only total MSA data are available for these areas.

N.A. – Not Available
0.0. – No Change

Virginia's high total income and per capita income perhaps best can be appreciated by considering our rank among the 50 states, as shown in Table IV on the previous page. The state's income per person of $17,640 is the tenth highest in the nation—we clearly retained our "top ten" position in 1988 by this measure. Another "top ten" distinction is our average annual growth rate for per capita income, 1982-1988—Virginia's 7.19 percent average is the tenth best in the nation for the current expansion, and higher than the rate achieved by the three of the states with higher incomes per person (Alaska, California, and Delaware).

The number ten ranking of our income per capita is the best indicator of Virginians' relative standard of living compared to people in other states. However our rankings for total income and total population are useful indicators for a different purpose. They show the total size and purchasing power of Virginia as a marketplace. In total dollar income received by residents, our state ranks eleventh, a full member of the "hundred billion plus" group. In number of people we rank only slightly lower—Virginia is the twelfth most populous state.

The official Federal estimates of Virginia's income growth confirm that our recent performance is only a very mild deceleration from the stellar growth rates averaged over the six-year expansion since 1982. For the six-year period, Virginia's total personal income grew at an average annual rate of 8.8 percent. In 1988 the rate was only a slightly lower 8.5 percent. Our prediction for 1989, as stated in the November issue, remains 8.3 percent.

Population growth each year since 1982 has averaged 1.4 percent, exactly equal to the 1987-1988 growth rate. We continue to expect a similar 1.4 percent gain in 1989.

As noted previously, Virginia averaged a 7.2 percent annual increase in per capita income from 1982-1988. The 1988 growth dipped to 7.0 percent, hardly a perceptible change. The Bureau's prediction for 1989, derived from our total income and total population forecasts, is another marginal deceleration, to a 6.8 percent gain.

In sum, newly released Federal income estimates for the states clearly confirm our previous assessment that Virginia became well-established in 1988 as a top-ranking income earner and marketplace, with the tenth place income per person—up from seventeenth position in 1982. Virginia's patterns of growth, over time and by industry, offer strong evidence that we will further solidify our top-level ranking this year. RLP

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VIRGINIA BUSINESS REPORT

BUREAU OF BUSINESS RESEARCH, SCHOOL OF BUSINESS ADMINISTRATION
THE COLLEGE OF WILLIAM AND MARY, WILLIAMSBURG, VIRGINIA

Report No. 343 May, 1989

Business in Virginia April, 1989

Among our seven "early" indicators for April, four climbed compared to April of 1987 and three declined, yielding the same up-to-down ratio as in March.

The three April negatives were the highly erratic bank debits, down 15.1 percent; new car registrations, off 7.8 percent; and our sample of retail stores, with sales down 2.8 percent. Car sales in Virginia declined in February and March as well, and the cumulative 1989 drop through April now is 12.0 percent. Virginians definitely have pulled back in their purchases of this "big-ticket" durable good, and no reversal seems imminent—look for May sales also to be below last year.

The retail sales decrease primarily is the lagged impact of an early Easter that sent March sales soaring, shifting some of what would have been spent in April forward into March. The March total retail figures from the Department of Taxation now are available (last column, Table II), showing a 13.4 percent statewide sales growth. That confirms the March growth (5.0 percent per store) reported for our sample in last month's Report. When total retail sales for April are reported, they most likely will show a very small gain, if any.

The other positive April indicators are more encouraging. Building permits statewide were up 13.7 percent, in dollar value. That brings the cumulative January-April advance to 4.3 percent, about in line with inflation, so Virginia's building boom has not turned down yet. Seven of our seventeen covered areas have experienced lower cumulative levels than last year, but that still is less than a majority, in number of areas and dollar contracts. Construction will ease, but recent figures do not signal a precipitous decline statewide.

Electricity and water consumption both advanced a little more than six percent in April. That large increase, occurring for both, cannot be due solely to rising household activity. Virginia businesses must be producing at a significantly higher volume, using more power and water in the process.

More production and construction, coupled with a 6.9 percent January-March increase in total retail sales, sustained very high job growth during the first quarter, averaging 4.4 percent for January-March after holding at 4.3 percent in March. Job growth will slow to below 4 percent this summer. But as a reliable and important coincident economic indicator, the payroll employment strength to date in 1988 is dramatic evidence of a sustained high momentum in the Virginia economy. RLP

Virginia Retail Sales in 1988

The Virginia Department of Taxation recently released their Taxable Sales Annual Report, 1988, showing retail sales by category, and by city and county. This report always is our most comprehensive source of retail sales information for Virginia. Bear in mind, though, the data are based on the Virginia Retail Sales and Use Tax revenues, so some major retail categories are excluded, such as prescription drugs, not taxed; and motor vehicles and gasoline, taxed separately. Given that caveat, in the following analysis we will treat the Department of Taxation data as the measure of Virginia retail sales.

Chart I

Nine Selected Business & Economic Indicators Percentage Change

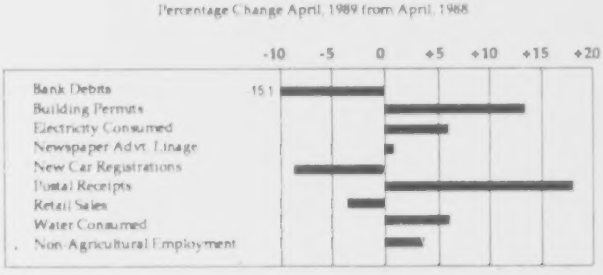
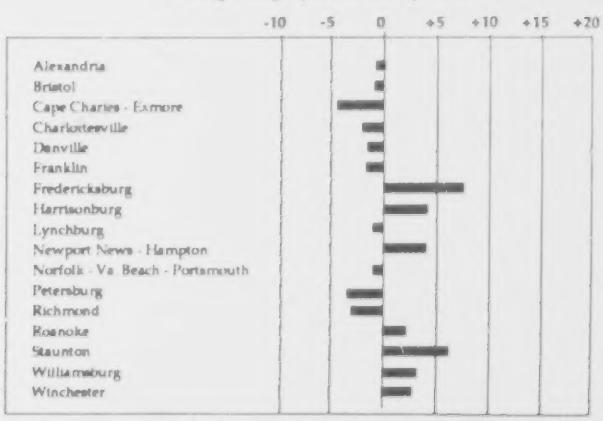


Chart II

City Indices



SELECTED BUSINESS AND ECONOMIC INDICATORS FOR 17 CITIES

TABLE I April 1986

Monthly Index Number Comparisons of Current Month to Same Month in Base Period (1977) - Base Period = 100

CITY	CITY INDEX*	BANK DEBITS	BUILDING PERMITS	ELECTRICITY CONSUMED	NEWSPAPER ADV LINAGE	NEW CAR REGISTRATIONS	MARCH NON-AGRICULTURAL EMPLOYMENT #	WATER CONSUMED	SAMPLE RETAIL SALES †	POSTAL RECEIPTS
The State		291.0	6.7	152.3	116.3	146.8	148.9	67.5	149.2	337.9
Alexandria	158.4	495.4	1493.9	171.1	N.A.	119.7	207.3	98.5	168.2	N.A.
Bristol	126.8	N.A.	58.5	114.5	77.3	82.5	120.1	95.0	116.3	313.6
Cape Charles - Exmore	145.3	N.A.	120.8	135.1	N.A.	74.8	N.A.	N.A.	100.6	364.0
Charlottesville	203.5	134.7	139.1	142.9	N.A.	106.9	114.6	130.7	254.5	384.0
Danville	133.5	N.A.	113.3	113.5	117.0	86.7	103.2	96.0	N.A.	250.3
Franklin	125.5	N.A.	142.8	111.1	114.9	83.6	N.A.	85.0	109.2	326.6
Fredericksburg	163.4	266.5	238.5	N.A.	179.6	162.6	N.A.	94.4	307.4	1838.3
Harrisonburg	209.6	383.4	148.2	N.A.	171.5	87.1	N.A.	159.1	224.8	365.4
Lynchburg	252.0	386.8	234.3	132.1	N.A.	92.5	100.1	123.7	165.7	1290.1
Newport News - Hampton	134.1	N.A.	196.7	127.6	38.0	79.2	141.9	116.6	185.4	N.A.
Norfolk - Va. Beach - Portsmouth	152.9	102.4	137.5	158.8		123.9		N.A.	176.3	N.A.
Petersburg	142.9	105.0	90.8	N.A.	N.A.	62.8	137.7	116.2	170.4	258.2
Richmond	176.5	356.8	139.5	170.6	127.0	107.6		103.9	160.1	N.A.
Roanoke	180.7	360.5	38.4	116.8	158.6	90.7	125.9	105.5	261.7	435.8
Staunton	153.3	233.0	225.2	N.A.	97.5	81.1	N.A.	N.A.	149.9	241.0
Williamsburg	186.6	194.8	225.2	179.3	N.A.	111.0	N.A.	104.3	160.2	405.4
Winchester	210.2	415.5	158.4	151.3	339.5	129.6	N.A.	N.A.	N.A.	N.A.

TABLE II April 1986

Percentage Change from Same Month Last Year

CITY	CITY INDEX*	BANK DEBITS	BUILDING PERMITS	ELECTRICITY CONSUMED	NEWSPAPER ADV LINAGE	NEW CAR REGISTRATIONS	MARCH NON-AGRICULTURAL EMPLOYMENT #	WATER CONSUMED	SAMPLE RETAIL SALES †	MARCH TOTAL RETAIL SALES ‡
The State		-15.1	-13.7	6.1	1.1	-7.8	4.3	6.2	-2.8	13.4
Alexandria	0.0	-0.8	349.8	7.1	N.A.	10.6	6.0	-1.8	-4.5	10.9
Bristol	1.4	N.A.	-45.9	2.1	9.0	-21.2	4.4	-12.0	5.0	20.2
Cape Charles - Exmore	5.7	N.A.	49.7	5.1	N.A.	27.6	N.A.	N.A.	6.4	4.6
Charlottesville	2.6	-23.7	-60.9	10.0	N.A.	3.0	0.3	6.7	-3.0	15.7
Danville	1.9	N.A.	76.0	9.9	-6.8	0.4	3.0	5.4	N.A.	-0.3
Franklin	-4.1	N.A.	-9.8	5.0	-7.5	-13.6	N.A.	4.9	-7.2	0.3
Fredericksburg	13.3	22.5	67.3	N.A.	2.4	-10.3	N.A.	24.9	20.7	19.1
Harrisonburg	7.2	41.4	20.4	N.A.	-1.2	-8.0	N.A.	11.6	9.4	20.1
Lynchburg	-0.1	-0.7	44.1	7.8	N.A.	-17.8	1.8	4.5	-1.7	7.9
Newport News - Hampton	1.3	N.A.	32.7	1.1	2.4	-4.9	0.8	16.6	-3.5	9.4
Norfolk - Va. Beach - Portsmouth	1.5	1.7	18.6	2.7		-17.6		N.A.	-6.0	6.1
Petersburg	1.6	7.9	-58.8	N.A.	N.A.	-11.2	2.8	10.6	-3.8	20.6
Richmond	0.0	-21.0	-22.2	8.3	2.8	-18.7		1.5	-3.8	14.7
Roanoke	1.4	-0.1	-62.8	8.3	-1.4	2.4	1.6	4.6	2.6	5.2
Staunton	5.4	66.0	24.9	N.A.	2.8	9.7	N.A.	N.A.	9.5	11.0
Williamsburg	5.0	23.6	1,302.0	6.1	N.A.	-6.4	N.A.	2.9	1.5	28.1
Winchester	3.3	1.8	135.9	6.8	3.9	-6.8	N.A.	N.A.	-2.0	11.3

TABLE III April 1986

Percentage Change January - April from Same Period Last Year

CITY	CITY INDEX*	BANK DEBITS	BUILDING PERMITS	ELECTRICITY CONSUMED	NEWSPAPER ADV LINAGE	NEW CAR REGISTRATIONS	JAN - MAR NON-AGRICULTURAL EMPLOYMENT #	WATER CONSUMED	SAMPLE RETAIL SALES †	JAN - MAR TOTAL RETAIL SALES ‡
The State		-8.5	4.3	2.3	-1.8	-12.0	4.4	0.0	0.6	6.9
Alexandria	-0.2	7.8	58.9	3.6	N.A.	-10.4	6.2	2.3	-3.0	6.0
Bristol	-0.1	N.A.	9.0	1.8	3.3	-11.8	3.8	-13.1	1.8	13.0
Cape Charles - Exmore	-4.4	N.A.	42.6	2.8	N.A.	-26.6	N.A.	N.A.	-2.5	5.2
Charlottesville	-1.9	-22.6	-24.1	2.8	N.A.	-44.8	0.2	8.1	3.6	7.7
Danville	-1.3	N.A.	-34.6	3.0	-9.2	-3.5	3.3	-1.4	N.A.	0.2
Franklin	-1.4	N.A.	-57.5	1.9	0.0	0.4	N.A.	-1.1	-4.6	1.8
Fredericksburg	7.4	20.9	32.8	N.A.	1.1	-5.1	N.A.	16.1	10.6	7.6
Harrisonburg	4.0	35.1	111.5	N.A.	-4.6	-15.9	N.A.	3.7	10.2	13.9
Lynchburg	-0.2	8.4	-87.1	1.9	N.A.	-18.9	1.7	6.7	0.6	5.1
Newport News - Hampton	3.8	N.A.	-29.2	1.2	0.4	-14.8	1.2	23.0	3.1	8.6
Norfolk - Va. Beach - Portsmouth	-0.9	-16.0	-9.4	-1.6		-3.7		N.A.	1.9	2.4
Petersburg	-2.7	-46.1	-40.2	N.A.	N.A.	-31.4	3.1	0.7	0.4	7.8
Richmond	-2.3	-8.7	18.7	3.3	-1.7	-20.6		0.5	-0.6	-3.2
Roanoke	-2.3	4.2	-18.0	3.0	-4.0	-2.9	1.7	17.0	0.5	4.3
Staunton	6.4	21.9	50.5	N.A.	0.7	-19.2	N.A.	N.A.	14.2	14.3
Williamsburg	2.8	15.8	113.3	2.5	N.A.	-6.3	N.A.	2.6	3.9	9.3
Winchester	2.6	9.8	282.4	4.1	3.6	-9.4	N.A.	N.A.	N.A.	12.0

* Computation of City Index is based upon a weighted arithmetic mean of all business and economic components listed except Building Permits and Bank Debits, which are excluded because of their highly erratic nature.
# Virginia Employment Commission data which lags behind current reports.
† Preliminary data based on a survey sample.
‡ Total sales based on sales tax information which lags behind current reports.
⊃ Only total MSA data are available for these areas.

N.A. – Not Available
0.0. – No Change

The year 1987 was a seller's market for most Virginia retailers. Total retail sales rose 12.2 percent, over $4 billion. That year we also added 3,246 new retail establishments—a 2.5 percent increase. However, the net result was a very strong 9.5 percent average gain in sales per establishment. Those percentages are based on current dollar sales, not adjusted for inflation. The 1987 inflation rate for commodities (thus excluding services) was 3.3 percent, so deflating with that measure reveals the real volume of goods sold per establishment climbed 6.0 percent in 1987.

In contrast, 1988 became a buyer's market at many Virginia retail establishments, the product of slower growth in retail demand with an accelerating rate of new store additions. The supply of retailers simply outran demand. That imbalance initially became evident when the full first quarter 1988 data were released, and we alerted our readers to the rising retail competition in the June, July, and September issues (for example, from the June 1988 issue: "...while total retail demand has grown by 5.4 percent, that demand increase has been at least matched, if not exceeded, in most cases by the addition of new retail facilities"). The imbalance persisted for the full calendar year, in spite of a strong Christmas season.

Virginia retail sales in 1988 reached $39.09 billion, up $2.05 billion or 5.6 percent from the 1987 level. An impressive total, but an overall growth rate less than one-half of the 1987 rate. At the same time 4,662 net new retail establishments opened, bringing the total to 139,080, an increase of 3.5 percent over 1987.

Adding 5.6 percent in dollar sales with a 3.5 percent addition to stores means sales per store in 1988 rose only 2.0 percent. But, inflation in commodity (physical goods) prices during 1988 was 3.5 percent. A 2.0 percent gain in sales per establishment when price increases averaged 3.5 percent points to a decrease of 1.4 percent in the physical volume of goods sold per store in Virginia. That is why we say an imbalance existed in 1988—we cannot continue to increase the number of stores at a more rapid pace than the real growth in demand, pushing down the real volume per store. Sooner or later the net growth in stores will move in line with the current, and future, more modest growth in retail demand, either from a slower pace in new construction, more closings of existing stores, or both.

On the consumer side, Virginia households did bring their retail buying more in line with their income in 1988. The total personal income of Virginia residents rose 8.5 percent last year, while retail sales grew by only 5.6 percent. Virginians apparently behaved like the average household nationwide, increasing their savings in 1988 after spending very freely in 1987.

Total retail sales are not just to Virginians, since tourism is big business in the Commonwealth. However, only about $3.0 billion of out-of-state visitor spending in 1987 was in the categories covered by the Virginia retail sales tax (since gasoline, admissions and most services are excluded), about 8.1 percent of the $37.03 billion total taxed sales. Therefore Virginians, at home and traveling in-state, accounted for almost 92 percent of the total 1987 retail sales, and at least that percent in 1988, permitting us to attribute the changes in retail spending generally to Virginians' behavior.

We will briefly examine where Virginians spend their money, looking at retail sales by type of store. The Department of Taxation sorts the stores into 56 individual categories. Ten of those are "other" or miscellaneous categories covering a motley assortment of dealers, and we removed them from the analysis (for those familiar with the data, categories 9, 19, 29, 39, 49, 59, 69, 79, 89, and 00). The remaining 46 categories we ranked by total sales, and the top ten categories are shown in Table IV, along with information on the number of establishments, sales per store, and growth rates.

These top ten retail categories account for 62.3 percent of Virginia retail buying, almost two-thirds of the sales taxed under Virginia's retail sales tax (keep in mind the exclusions noted earlier). As a group, these categories of stores recorded a 6.3 percent gain in total 1988 sales, better than the Virginia overall rise of 5.6 percent. The group of ten also realized a small (0.9 percent) increase in real volume per store even though 4 of the 6 categories experienced declines.

The top ten list reaffirms the dominance of food retailers. Chain groceries, non-chain groceries, and restaurants are three of the top five types of retailers, accounting for $10.2 billion in 1988 sales, 30.6 percent of the state total. Furthermore, retail spending at chain groceries and restaurants has been growing rapidly. The rapid population growth in recent years has been a boon to both types of retailers. Both also have benefitted, but restaurants more so, from the strong rise in the percent of the adult Virginia population at work—more Virginians are away from home more hours per week than ever before.

The restaurant business, though, has become even more competitive due to the high growth in new establishments. Real (adjusted for a 3.5 percent commodity inflation) sales per restaurant showed a negligible 0.3 percent rise in 1988. Groceries were a different story. While the generally smaller non-chain stores have declined in numbers and real volume, a drop in chain grocery stores coupled with the larger size of new stores and growing total sales produced a spectacular growth in the real volume per chain grocery.

Clothing stores achieved double-digit growth in 1988 sales, up 14.2 percent. Even with an almost 6 percent addition to store numbers, real sales per store were up 4.4 percent.

Among the top ten categories, only the one designated department and discount stores recorded a decrease in total dollar sales. Furthermore, even with an ongoing decline in the number of such stores, especially department stores, the 1988 real volume per store fell 2.5 percent in this category.

The continuing building boom in 1988 sustained total sales growth for building material retailers, yielding a modest real increase per store. However, that boom failed to maintain high growth for furniture sales—that sector's total gain for the year was 3.2 percent. With the number of stores jumping by 6.0 percent, the real volume per store declined by 5.9 percent—there must be some very unhappy furniture dealers.

Hotels and motels also saw modest gains in the lodging industry. Coupled with establishment growth of 1.8 percent, the result per hotel/motel was a mild decrease in real sales volume.

In sum, Virginia's retail sales growth slowed dramatically in 1988. Rates of growth, in sales and stores, varied substantially across retail categories. However the continued high growth in the number of stores meant a decline in the real sales volume, for many types of retailers as well as the average Virginia retail establishment. RLP

TABLE IV

Virginia Retail Sales, 1988

	1988 Sales	'87-'88 % Change Sales	1988 Estab.	'87-'88 % Change Estab.	Sales Per Estab.	% Change Sales Per Estab.	% Change Real Sales Per Estab.
TOTAL RETAIL SALES	$39,086,951,359	5.5%	139,080	3.5%	$281,039	2.0%	-1.4%
TOP TEN RETAIL CATEGORIES							
24-Groceries, etc., Chain	$6,000,468,520	11.0%	1,685	-7.4%	$3,561,109	19.9%	15.9%
27-Restaurants, Drive-Ins, etc.	3,959,888,007	7.2%	12,168	3.3%	325,435	3.8%	0.3%
40-Dep't. & Discount Stores	3,056,164,494	-0.9%	523	-1.9%	5,843,527	1.0%	-2.5%
50-Building Materials, Lumber, Stone, etc.	2,909,263,832	7.2%	2,302	2.3%	1,263,798	4.7%	1.2%
25-Groceries, etc., Non-chain	2,004,393,392	0.7%	5,846	-2.0%	342,866	2.7%	-0.7%
1- Clothing-Men, Women, Children	1,542,241,335	14.2%	4,438	5.7%	347,508	8.0%	4.4%
90-Hotels, Motels, Camps, etc.	1,525,820,023	4.0%	1,859	1.8%	820,775	2.2%	-1.3%
41-Dry Goods & Variety Stores	1,254,945,757	5.5%	1,254	-2.0%	1,000,754	7.6%	4.0%
30-Furniture, Floor Coverings, etc.	1,190,159,299	3.2%	5,559	6.0%	214,096	-2.6%	-5.9%
10-Automotive Accessories, Parts & Tires	895,006,750	5.2%	3,532	-1.3%	253,399	6.7%	3.0%
Sum, Top Ten Categories	24,338,351,409	6.3%	39,166	1.8%	621,415	4.4%	0.9%

Source: Virginia Department of Taxation Data

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VIRGINIA BUSINESS REPORT

BUREAU OF BUSINESS RESEARCH, SCHOOL OF BUSINESS ADMINISTRATION
THE COLLEGE OF WILLIAM AND MARY, WILLIAMSBURG, VIRGINIA

Report No. 344 June, 1989

Business in Virginia May, 1989

Seven of the individual indicators reported each month in Table II show the year-to-year percentage changes for the immediately preceding month—in this case, for May. These seven indicators are our "early" series, supplemented by data lagged one additional month for nonagricultural payroll employment and Department of Taxation figures on taxable retail sales.

For the month of May, the seven "early" indicators reveal weakening consumer demand and lower levels of planned construction, on the average for the state and in the majority of the seventeen urban areas we track.

Consumer demand for new cars continues to fall below last year's levels. This May, new car registrations statewide were 5.4% lower than last May with fourteen out of the seventeen areas experiencing declines (we use whole weeks for comparability year-to-year, so our May result does not include Memorial Day car sales).

The general merchandise stores in our retail sample also encountered sagging sales, down 4.0 percent per store in May. The decreases were concentrated in Northern Virginia, Petersburg, and Hampton Roads; but the retail gains in other areas generally were very modest—only in five of the seventeen areas did the stores achieve May-to-May growth of five percent or more.

Weak consumer demand was complemented by a 14.9 percent drop in the dollar value of building permits for our sample of urban areas. Furthermore, eleven of the seventeen areas reported declines. This overall fall, shared by most areas, is our first sign for 1989 that planned construction finally is slowing and moving more in line with the demand for new structures.

Two more of our "early" indicators also fell in May: bank debits, down 3.5 percent, and newspaper advertising, off 1.0 percent. Thus five of the seven "early" series fell below last year's levels, pointing to a broader softening in Virginia's economic pace than was evident in March and April. The only two pluses were in utility consumption: electricity use rose 5.5 percent and water consumption, 6.0 percent. Those utility increases imply both population and production are well ahead of this time last year in spite of the growing evidence that overall demand in Virginia is shifting to a lower growth path.

The lagged information on April taxable sales (last column, Table II) shows the April-to-April advance was 5.2 percent, not far above the inflation rate. Thus, as suspected last month, the total real volume of retail trade in Virginia currently is creeping, not leaping, forward.

The strongest economic performance remains in jobs—the April rise was 4.1 percent, bringing the gain for the year to 4.3 percent, above the 1988 annual rate of 3.7 percent. The job growth rate will slow down in the coming months but still remain positive. Consumer demand may be weakening in Virginia. However, higher business demand throughout the United States and accelerating foreign demand for a wide range of Virginia products and services are two potent forces not directly covered by our indicators that are creating new opportunities and jobs in Virginia. RLP

Chart I

Nine Selected Business & Economic Indicators Percentage Change

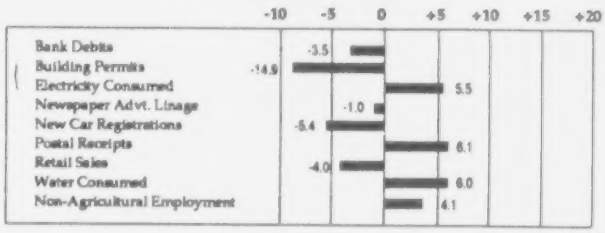
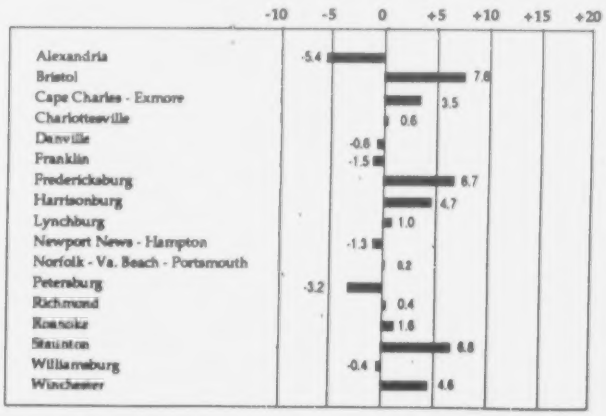


Chart II

City Indices



SELECTED BUSINESS AND ECONOMIC INDICATORS FOR 17 CITIES

TABLE I May, 1989

Monthly Index Number Comparisons of Current Month to Same Month in Base Period (1977) - Base Period = 100

CITY	CITY INDEX*	BANK DEBITS	BUILDING PERMITS	ELECTRICITY CONSUMED	NEWS-PAPER ADV. LINAGE	NEW CAR REGIS-TRATIONS	APRIL NON-AGRI-CULTURAL EMPLOYMENT #	WATER CONSUMED	SAMPLE RETAIL SALES †	POSTAL RECEIPTS
The State		310.4	207.3	138.8	102.9	188.5	150.0	98.9	142.8	363.6
Alexandria	148.6	500.2	434.7	153.3	N.A.	170.4	208.8	102.0	124.4	N.A.
Bristol	118.1	N.A.	65.5	102.2	78.2	115.9	121.2	96.6	142.8	386.6
Cape Charles - Exmore	180.5	N.A.	419.6	129.9	N.A.	106.5	N.A.	N.A.	93.5	337.0
Charlottesville	199.2	148.7	327.9	130.0	N.A.	142.1	115.4	140.7	249.0	391.5
Danville	139.2	N.A.	135.5	124.4	122.7	105.6	105.2	90.5	N.A.	241.4
Franklin	138.5	N.A.	155.7	114.0	136.8	96.7	N.A.	90.2	126.9	252.6
Fredericksburg	415.9	278.5	238.5	N.A.	186.5	240.2	N.A.	97.2	298.7	1997.5
Harrisonburg	201.2	412.7	2130.3	N.A.	177.0	107.5	N.A.	183.1	182.3	340.8
Lynchburg	268.0	115.6	134.8	120.4	N.A.	112.5	101.1	118.1	195.3	N.A.
Newport News - Hampton	126.4	N.A.	212.9	117.3	101.2	100.0	143.7	130.2	128.5	N.A.
Norfolk - Va. Beach - Portsmouth	185.6	114.5	245.8	145.1		136.9		88.7	280.7	N.A.
Petersburg	146.4	129.9	182.1	N.A.	N.A.	64.2	138.9	121.7	185.0	320.0
Richmond	174.1	399.5	302.4	153.0	122.1	129.7		114.1	177.1	376.3
Roanoke	179.6	435.1	61.3	107.6	156.7	97.8	125.8	115.7	197.2	405.4
Staunton	160.1	209.5	556.5	N.A.	101.5	98.0	N.A.	N.A.	174.8	282.3
Williamsburg	187.7	201.0	301.8	159.4	N.A.	175.4	N.A.	111.3	154.6	370.3
Winchester	187.9	N.A.	215.9	130.0	192.0	177.5	N.A.	N.A.	N.A.	N.A.

TABLE II May, 1989

Percentage Change from Same Month Last Year.

CITY	CITY INDEX*	BANK DEBITS	BUILDING PERMITS	ELECTRICITY CONSUMED	NEWS-PAPER ADV. LINAGE	NEW CAR REGIS-TRATIONS	APRIL NON-AGRI-CULTURAL EMPLOYMENT #	WATER CONSUMED	SAMPLE RETAIL SALES †	APRIL TOTAL RETAIL SALES ‡
The State		-3.5	-14.9	5.5	-1.0	-5.4	4.1	6.0	-4.0	5.2
Alexandria	-5.4	8.6	-64.4	6.1	N.A.	1.2	6.2	12.2	-24.9	6.1
Bristol	7.6	N.A.	-7.6	4.9	6.3	10.6	3.4	-8.2	14.8	6.7
Cape Charles - Exmore	3.5	N.A.	-3.4	10.0	N.A.	-7.7	N.A.	-0.5	3.3	13.1
Charlottesville	0.6	-21.2	-80.6	5.9	N.A.	-11.8	0.6	10.8	1.6	-5.4
Danville	-0.6	N.A.	-7.6	10.0	-13.1	-10.7	3.4	3.6	N.A.	3.0
Franklin	-1.5	N.A.	-26.9	2.0	-7.3	-35.9	N.A.	-4.1	5.7	16.3
Fredericksburg	6.7	33.4	4.6	N.A.	3.9	-0.7	N.A.	23.2	5.3	4.5
Harrisonburg	4.7	54.3	208.5	N.A.	0.2	-6.5	N.A.	5.4	11.9	-1.9
Lynchburg	1.0	-15.1	-29.8	3.4	N.A.	-4.6	2.2	6.2	1.6	-3.8
Newport News - Hampton	-1.3	N.A.	-21.9	9.0	2.7	-9.1	0.8	18.6	-15.1	15.0
Norfolk - Va. Beach - Portsmouth	0.2	8.4	11.2	4.2		-6.2		0.5	-2.6	7.7
Petersburg	-3.2	31.6	-50.5	N.A.	N.A.	-38.7	3.5	13.7	-3.9	10.7
Richmond	0.4	-7.2	2.8	4.9	-7.0	-16.8		2.5	4.0	4.3
Roanoke	1.6	23.6	18.4	5.3	0.8	-2.6	1.5	4.2	1.5	1.1
Staunton	6.8	43.3	935.5	N.A.	1.6	-3.6	N.A.	N.A.	12.0	6.7
Williamsburg	-0.4	24.6	-19.4	-1.0	N.A.	-8.4	N.A.	5.9	0.8	-2.0
Winchester	4.6	N.A.	-56.0	2.4	N.A.	4.5	N.A.	N.A.	N.A.	6.9

TABLE III May, 1989

Percentage Change January - May from Same Period Last Year.

CITY	CITY INDEX*	BANK DEBITS	BUILDING PERMITS	ELECTRICITY CONSUMED	NEWS-PAPER ADV. LINAGE	NEW CAR REGIS-TRATIONS	JAN. - APRIL NON-AGRI-CULTURAL EMPLOYMENT #	WATER CONSUMED	SAMPLE RETAIL SALES †	JAN. - APRIL TOTAL RETAIL SALES ‡
The State		-7.7	-6.5	2.8	-1.6	-10.4	4.3	1.4	0.4	6.4
Alexandria	-1.9	8.0	18.1	4.0	N.A.	-7.5	6.2	4.9	-9.6	5.7
Bristol	1.3	N.A.	6.0	-0.8	4.0	-6.8	3.7	-12.1	4.4	10.2
Cape Charles - Exmore	-2.5	N.A.	32.9	4.0	N.A.	-22.6	N.A.	N.A.	-1.2	7.3
Charlottesville	-1.7	-22.3	-54.6	3.3	N.A.	-38.8	0.1	8.7	3.2	3.9
Danville	-1.3	N.A.	-30.8	4.4	-10.2	-6.0	3.4	-0.3	N.A.	0.7
Franklin	-2.5	N.A.	-52.3	1.9	-1.7	-10.1	N.A.	-1.7	-3.6	2.7
Fredericksburg	7.1	23.4	24.3	N.A.	1.7	-4.0	N.A.	17.6	9.3	6.8
Harrisonburg	3.9	38.9	139.6	N.A.	-3.5	-13.7	N.A.	4.1	10.5	9.2
Lynchburg	0.0	6.5	53.5	2.2	N.A.	-15.6	1.8	6.5	0.8	2.6
Newport News - Hampton	2.9	N.A.	-28.0	2.4	N.A.	-13.4	1.1	26.0	-1.2	10.4
Norfolk - Va. Beach - Portsmouth	-0.9	-14.5	-4.8	-0.7		-4.3		N.A.	-2.0	3.8
Petersburg	-2.8	-37.1	-43.6	N.A.	N.A.	-33.2	3.2	3.2	-0.5	8.6
Richmond	-1.5	-8.4	13.1	3.5	-1.6	-19.6		0.9	0.4	-1.1
Roanoke	0.6	8.0	-14.0	3.4	-3.0	-2.9	1.7	0.5	0.8	3.4
Staunton	8.4	26.4	136.7	N.A.	0.9	-15.8	N.A.	N.A.	13.7	12.2
Williamsburg	5.3	17.6	-40.1	19.9	N.A.	-2.9	N.A.	3.4	3.9	5.1
Winchester	2.8	N.A.	44.2	3.8	N.A.	-6.0	N.A.	N.A.	N.A.	10.5

* Computation of City Index is based upon a weighted arithmetic mean of all business and economic components listed except Building Permits and Bank Debits, which are excluded because of their highly erratic nature.
\# Virginia Employment Commission data which lags behind current reports.
† Preliminary data based on a survey sample.
‡ Total sales based on sales tax information which lags behind current reports.
⊃ Only total MSA data are available for these areas.

N.A. – Not Available
0.0. – No Change

Advanced Electronics Manufacturing in Virginia: Some Findings

Electronic circuitry to control how a product functions is becoming more and more pervasive. It moved from aerospace and computers to consumer electronics and then to appliances such as ovens and dishwashers; to automobiles, replacing carburetors and many gauges; and strongly into toys, for both children and adults.

In manufacturing these advanced electronic components, a key step is attaching chips containing circuitry to printed wiring boards on which these chips are interconnected. How should the chips be mounted to the printed wiring boards so that the chips are "plugged in" efficiently? The most common method is "through-hole" mounting. Holes are drilled in the board, and wires attached to the chip are passed through these holes and soldered in place. There are some obvious drawbacks in use of space (always at a premium in electronic circuitry)— holes cannot be but so close, space must be allowed for affixing the wires, and mounting the chip uses both sides of the printed boards.

There is another way to mount the chip— in effect, "gluing" it on the surface of the printed board with a solder paste. That mounting method uses only one side of the board, freeing up the other side; and with no holes, the connector pins can be much closer together. This method is Surface Mount Technology (SMT), and while it is not as easy to do as it sounds, it can cut board size up to 75%, reduce weight, and increase the operating speed and efficiency of the completed circuit board.

Its advantages are making SMT a rapidly growing production technology in the electronics industry. Today, approximately 13% of all components used in the domestic market are SMT. This compares to a 17% usage rate in Europe and over 60% in Japan. Industrial experts estimate that in 1992 more than 40% of the projected 89 billion electronic components used in the United States to manufacture nearly $400 billion worth of electronic equipment will be surface mount components.

Such new manufacturing technology for the high-tech growing electronics industry is an exciting concept, and any state government certainly would say "we encourage it". But, how can a state help? Two ways are providing employee training and supporting research and testing of production techniques and products.

However before a state government jumps into a task as specific as SMT training and research, it needs some very basic information. For one thing, how many companies are there in Virginia that might use SMT, and where are they? Secondly, what do they feel is needed for them to use SMT effectively?

To answer such questions a Virginia government partnership undertook a statewide study of the state's advanced electronics industry. The partners were: The Center for Public-Private Initiatives; Virginia Department of Economic Development; the Virginia Community College System (all 23 colleges); Center for Innovative Technology through its Economic and Technology Development Directors with the community college system; and our Bureau of Business Research, as the agency to design the market research instruments and analyze the results. Some excerpts from the report summary follow.

Out of an initial list of approximately 600 electronics related firms, 211 were identified as Virginia's current electronic circuit board industry. These are firms that use circuit boards in their products, produce them, or do research and design work on boards. These 211 firms comprise a substantially larger Virginia industry than initially expected.

This means that a large, sophisticated circuit board industry currently exists in the Commonwealth—and it is one that already appears to have a substantial percent of firms committed to using SMT.

These firms have been sorted geographically into four distinct regions. These regions and their appropriate community colleges are:

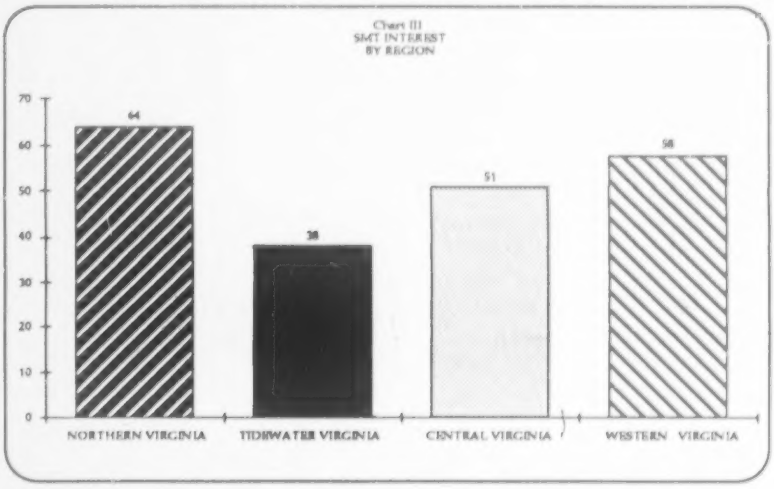
Northern Virginia:	Germanna, Lord Fairfax, and Northern Virginia
Tidewater Virginia:	Eastern Shore, Paul D. Camp, Rappahannock, Thomas Nelson, and Tidewater
Central Virginia:	Blue Ridge, John Tyler, J. Sargeant Reynolds, Piedmont, Southside
Western Virginia:	Central, Dabney S. Lancaster, Danville, Mountain Empire, New River, Patrick Henry, Southwest, Virginia Highlands, Virginia Western, Wytheville

The Western region was chosen to include Danville through Lynchburg and Roanoke, which accounts for placing Central Community College in the region labeled Western Virginia.

One of the more interesting findings of this initial research is that SMT interest and awareness appear to be relatively evenly distributed across Virginia. As seen in Chart III, of the 211 companies indicating SMT interest, 64 (30.3%) were in Northern Virginia and 58 (27.5%) in Western Virginia. Central Virginia was third with 51 (24.2%), and Tidewater was fourth with 38 firms (18%).

Responses also show that 118 firms design their own circuit boards, 108 assemble them, 72 use surface mount circuit boards in their products, 42 perform SMT rework, and 38 currently use Surface Mount Technology in the production of their circuit boards. This reinforces other findings that indicate Virginia's existing advanced electronics industry is far more sophisticated than it was originally felt to be.

Of the 173 companies responding to a question of circuit board use, 72 firms or 41.6% of the total use surface mount circuit boards in their products, showing a significant adoption of SMT technology has already occurred within Virginia's electronics industry. Of the firms using SMT circuit boards, the largest number are in Central Virginia (22 firms, 30.5%), closely followed by Western Virginia (21 firms, 29.2%). Northern Virginia (17 firms, 23.6%) and Tidewater (12 firms, 16.7%) ranked third and fourth.



Since one of the key reasons for initiating this study was to identify interest in establishing research and/or training facilities, it was encouraging to note that 98 firms expressed some measure of interest in establishing an in-state training facility. Sixty of these firms (61.2%) indicated they were "interested" while 38 (38.8%) were "very interested".

Positive interest in establishing a research laboratory was expressed by 107 firms with 57 (53.3%) responding "interested" and 50 (46.7%) responding as "very interested". A plurality of "interested" or "very interested" firms appears to be in Northern Virginia (35 firms), followed by Western Virginia with 31 positive responses, Tidewater with 24, and Central Virginia with 17.

While this phase of the research is exploratory, these levels of awareness and interest combined with other survey findings suggest the need to continue pursuing a course of action which will bring together industry, business, and higher education to promote an advanced technology support system in the Commonwealth. RLP

The Virginia Business Report is published monthly except in December by the Bureau of Business Research. The publication is provided free of charge as a public service. For information call the Bureau at (804) 253-4493.

Roy L. Pearson, Director, Bureau of Business Research
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VIRGINIA BUSINESS REPORT

BUREAU OF BUSINESS RESEARCH, SCHOOL OF BUSINESS ADMINISTRATION
THE COLLEGE OF WILLIAM AND MARY, WILLIAMSBURG, VIRGINIA

Report No. 345 July, 1989

Business in Virginia June, 1989

Virginia statistics that became available in July support and extend the signals flashed last month: "...weakening consumer demand and lower levels of planned construction, on the average for the state and in the majority of the seventeen areas we track" (Virginia Business Report, June 1989).

Low demand for new cars has been a continuing condition throughout 1989. This June's decrease of 9.2 percent (compared to June 1988) brings the first-half decline for 1989 to 9.7 percent.

The softness in general consumer demand was apparent in April and May among our sample of Virginia retail stores, with both months yielding lower sales levels than for the same months last year. The June rise of 1.0 percent still shows no real growth for our sample. Now we also have the more comprehensive total retail sales figures for May from the Virginia Department of Taxation. In spite of the fact that May 1989 contained one more shopping day than May 1988, total retail sales for May 1989 were 0.7 percent lower than last year. Furthermore, declines in retail sales were widely dispersed, occurring in eight of the seventeen areas we specifically report. We do not expect total retail sales to remain below last year's levels in the coming months; but overall growth is not likely to be much above the inflation rate.

The dollar volume of building permits, revealing construction plans, moved erratically during the first four months of 1989 but still showed a cumulative gain of 4.3 percent across our statewide sample of Virginia localities. The first clear sign for 1989 that planned construction is slowing came in May, when a 14.9 percent decrease pulled the cumulative January-May amounts into the red. Now we have data showing a 7.3 percent drop occurred in June, leaving the cumulative dollar amounts for the first half of 1989 down 6.7 percent from the same period last year. Thus the May and June permit information are strong evidence that Virginia's construction boom is reaching its peak, and most likely building activity will wane in the coming months.

Only two of our indicators still are recording strong growth: electricity consumption and nonagricultural employment. The job growth in particular reveals the supply-side base of Virginia's current expansion. Output is rising, particularly in service sectors (such as medical care) and also in manufacturing, steadily adding to the total income being generated in Virginia. That guarantees Virginia's continued growth in the near-term; but, with consumer demand and construction in the role of followers rather than growth leaders.RLP

Chart I

Nine Selected Business & Economic Indicators Percentage Change

Percentage Change June, 1989 from June, 1988

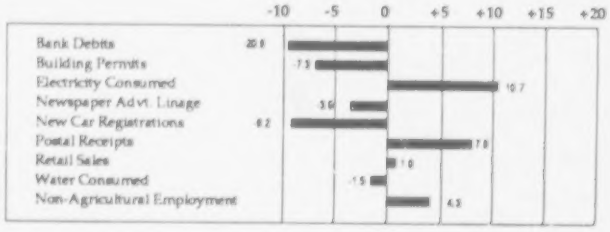
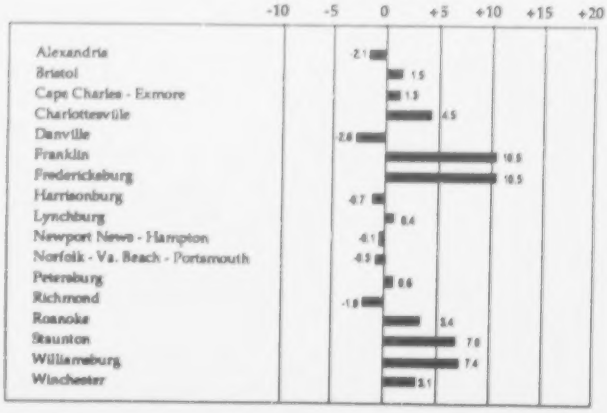


Chart II

City Indices

Percentage Change June, 1989 from June, 1988



SELECTED BUSINESS AND ECONOMIC INDICATORS FOR 17 CITIES

TABLE I June, 1989

Monthly Index Number Comparisons of Current Month to Same Month in Base Period (1977) - Base Period = 100

CITY	CITY INDEX*	BANK DEBITS	BUILDING PERMITS	ELECTRICITY CONSUMED	NEWSPAPER ADV. LINAGE	NEW CAR REGISTRATIONS	MAY NON-AGRICULTURAL EMPLOYMENT #	WATER CONSUMED	SAMPLE RETAIL SALES †	POSTAL RECEIPTS
The State		329.9	269.7	165.8	113.8	150.0	151.2	84.1	163.3	470.0
Alexandria	150.0	617.4	904.3	189.4	N.A.	136.1	211.1	101.0	139.0	N.A.
Bristol	138.9	N.A.	62.8	99.6	72.8	98.9	121.2	115.6	127.1	728.3
Cape Charles - Exmore	142.6	N.A.	1072.6	155.5	N.A.	74.8	N.A.	N.A.	116.1	275.7
Charlottesville	191.8	158.9	657.1	162.6	N.A.	111.8	116.1	134.1	226.5	364.3
Danville	129.8	N.A.	1139.4	134.3	106.5	81.8	105.7	90.8	N.A.	274.6
Franklin	160.8	N.A.	222.2	144.0	128.9	163.9	N.A.	100.4	140.1	300.3
Fredericksburg	213.6	265.0	356.2	N.A.	179.0	195.2	N.A.	100.0	278.6	1828.0
Harrisonburg	181.4	373.0	714.8	N.A.	159.9	95.2	N.A.	154.6	177.2	339.2
Lynchburg	258.0	440.5	441.8	129.8	N.A.	89.9	101.9	128.9	184.8	1205.4
Newport News - Hampton	138.4	N.A.	351.0	145.5	107.0	84.3	145.6	N.A.	168.9	N.A.
Norfolk - Va. Beach - Portsmouth	160.4	242.9	290.2	175.8		106.3		91.1	200.0	N.A.
Petersburg	123.3	124.2	93.5	N.A.	N.A.	67.4	139.1	129.4	120.3	283.8
Richmond	168.0	362.8	131.9	183.3	115.1	104.7		120.4	161.4	376.8
Roanoke	161.6	417.6	N.A.	118.8	181.2	77.6	126.7	115.4	144.4	422.7
Staunton	208.9	143.9	146.8	N.A.	84.3	89.2	N.A.	N.A.	248.1	261.3
Williamsburg	204.0	205.0	628.6	199.7	N.A.	176.3	N.A.	118.9	167.6	510.1
Winchester	165.1	442.2	597.2	145.7	237.5	120.1	N.A.	N.A.	N.A.	N.A.

TABLE II June, 1989

Percentage Change from Same Month Last Year

CITY	CITY INDEX*	BANK DEBITS	BUILDING PERMITS	ELECTRICITY CONSUMED	NEWSPAPER ADV. LINAGE	NEW CAR REGISTRATIONS	MAY NON-AGRICULTURAL EMPLOYMENT #	WATER CONSUMED	SAMPLE RETAIL SALES †	MAY TOTAL RETAIL SALES ‡
The State		-20.9	-7.3	10.7	-3.6	-9.2	4.3	-1.5	1.0	-0.7
Alexandria	2.1	8.6	-26.9	10.0	N.A.	5.8	5.9	-17.0	-7.0	-0.2
Bristol	1.5	N.A.	-46.5	17.6	11.0	-2.6	2.8	-11.9	-0.1	-2.7
Cape Charles - Exmore	1.3	N.A.	27.7	14.6	N.A.	16.5	N.A.	N.A.	-7.7	0.0
Charlottesville	4.5	-26.0	93.4	16.0	N.A.	-13.9	2.5	-0.3	10.1	1.3
Danville	-2.8	N.A.	585.2	10.8	-21.1	-5.6	3.4	0.7	N.A.	-4.7
Franklin	10.5	N.A.	-48.6	16.8	-0.8	58.7	N.A.	-3.0	6.4	-6.8
Fredericksburg	10.5	9.3	-31.4	N.A.	7.9	-2.2	N.A.	12.0	18.6	0.0
Harrisonburg	-0.7	25.6	-61.5	N.A.	0.9	9.9	N.A.	-10.2	1.6	-10.4
Lynchburg	0.4	4.0	50.3	7.2	N.A.	-14.9	2.5	8.4	-1.2	3.3
Newport News - Hampton	-0.1	N.A.	38.1	15.0	-3.1	-9.3	1.1	N.A.	-1.5	-1.7
Norfolk - Va. Beach - Portsmouth	-0.3	-54.4	-9.9	12.2		-4.3		3.4	-4.0	0.2
Petersburg	0.6	16.0	31.3	N.A.	N.A.	-1.4	3.5	16.0	-6.6	5.6
Richmond	1.9	-16.8	-50.7	8.6	-5.5	-18.2		-6.9	0.9	-1.0
Roanoke	3.4	2.6	N.A.	8.4	-5.5	-9.9	1.6	-0.8	13.5	-3.5
Staunton	7.0	5.5	-65.9	N.A.	-2.0	-2.6	N.A.	N.A.	14.4	3.3
Williamsburg	7.4	9.0	-18.9	12.1	N.A.	10.6	N.A.	13.0	2.5	8.5
Winchester	3.1	-0.3	240.6	8.0	5.8	-0.5	N.A.	N.A.	N.A.	1.8

TABLE III

Percentage Change January - June from Same Period Last Year.

CITY	CITY INDEX*	BANK DEBITS	BUILDING PERMITS	ELECTRICITY CONSUMED	NEWSPAPER ADV. LINAGE	NEW CAR REGISTRATIONS	JAN. - MAY NON-AGRICULTURAL EMPLOYMENT #	WATER CONSUMED	SAMPLE RETAIL SALES †	JAN. - MAY TOTAL RETAIL SALES ‡
The State		-10.1	-6.7	4.1	-2.1	-9.7	4.3	0.9	-0.2	4.9
Alexandria	-2.1	8.1	3.8	4.9	N.A.	-5.4	6.2	-0.3	-8.9	4.5
Bristol	1.2	N.A.	-5.9	1.4	5.1	-6.1	3.5	-12.1	3.6	7.9
Cape Charles - Exmore	-3.1	N.A.	31.4	5.7	N.A.	-18.4	N.A.	N.A.	-3.8	5.6
Charlottesville	-0.9	-23.1	-40.1	5.3	N.A.	-35.6	0.6	7.0	4.2	3.3
Danville	-1.7	N.A.	53.2	5.5	-12.2	-6.0	3.4	-0.1	N.A.	-0.5
Franklin	-0.6	N.A.	-51.3	4.2	-1.7	1.3	N.A.	-2.0	-2.3	0.6
Fredericksburg	7.7	20.7	1.6	N.A.	2.8	-3.7	N.A.	16.5	11.0	5.3
Harrisonburg	3.0	36.6	51.3	N.A.	-2.7	-10.1	N.A.	1.4	9.2	4.8
Lynchburg	0.1	6.0	52.6	2.9	N.A.	-15.5	1.9	6.9	0.5	2.7
Newport News - Hampton	-0.4	N.A.	-19.2	4.4	N.A.	-12.7	1.1	N.A.	-1.2	7.7
Norfolk - Va. Beach - Portsmouth	-0.9	-23.7	-6.0	1.3		-4.3		N.A.	-2.4	3.0
Petersburg	-2.5	-31.1	-94.0	N.A.	N.A.	-28.7	3.2	5.4	-1.8	8.0
Richmond	-1.6	-9.8	-2.4	4.3	-2.1	-19.4		-0.7	0.5	-1.1
Roanoke	1.1	7.0	N.A.	4.2	-3.5	-4.1	1.7	0.3	3.1	1.9
Staunton	6.4	23.0	108.0	N.A.	0.4	-13.6	N.A.	N.A.	13.8	10.2
Williamsburg	5.7	15.9	-44.9	18.5	N.A.	-0.3	N.A.	5.2	3.6	6.0
Winchester	3.0	7.5	83.7	4.5	4.1	-5.2	N.A.	N.A.	N.A.	8.6

* Computation of City Index is based upon a weighted arithmetic mean of all business and economic components listed except Building Permits and Bank Debits, which are excluded because of their highly erratic nature.
# Virginia Employment Commission data which lags behind current reports.
† Preliminary data based on a survey sample.
‡ Total sales based on sales tax information which lags behind current reports.
⊃ Only total MSA data are available for these areas.

N.A. – Not Available
0.0. – No Change

FUTURE JOBS FOR VIRGINIANS, PART I

Christine H. Grahl
Research Assistant

Two hundred years ago, Virginia exemplified a stable, pre-industrial, and agricultural economy. Not only was the field of occupational projections an anachronism—it would have been completely unnecessary. In an economy where well over 90% of the "working population" was involved in the production of agricultural goods, the concepts of job relocation or even careers as we know them today would have been completely alien. But a lot has changed in Virginia since then, and occupational projections are a valuable input for public as well as personal planning in our modern society. From the occupational projections for 1984-1995 compiled by the Virginia Employment Commission in early 1987 it is possible to see how the Virginian economy as a whole is changing as well as examine the changes projected for each of the nine major occupational groups.

The projections of the Virginia Employment Commission were derived by merging industry projections with the total wage and salary employment industry-occupation matrix table which reflects the occupational staffing patterns for each industry. Thus the employment projections for each industry were converted to occupational projections for that industry. The resulting occupational projections were then summed across all industries to yield total employment forecasts for each occupation. A more detailed explanation of the projection methodology can be found in the Virginia Employment Commission's publication Virginia's Occupational Employment Projections 1990.

The occupational employment projections for the 1984-1995 period in Virginia reflect the continual overall growth that we have been experiencing for the past several years. In fact, recent high growth has made these estimates rather conservative in terms of the number of jobs to expect by 1995. However, the percentage comparisons between Virginia and the nation, and across occupations, remain highly informative. When compared with the national employment projections prepared by the Bureau of Labor Statistics and presented in the Monthly Labor Review of November 1985 by George T. Silvestri and John M. Lukasiewitz, Virginia's projected growth rate of 29% is 14.1 percentage points above the projected national total growth rate of 14.9%—almost double the national rate. In addition, Virginia's projected growth rates were above the national projected growth rate for all 9 of the broad occupational groups listed.

As shown in Table IV, service workers lead these 9 categories with expected growth in Virginia of 45.0%. This occupational group, which includes a wide range of jobs from food preparers to janitors to firefighters, will lead in numbers of new jobs as well as percent gain, adding 155,441 net new job openings over the 1984-1995 period.

Professional and technical workers will comprise Virginia's second fastest growing occupational group with a projected rise of 35.4%, creating 152,251 new positions. This is another occupational group that consists of many different jobs—including engineers, computer operators, and technicians. Sales workers are third with a projected 32.3% growth rate, equal to 48,862 additional jobs. Managerial workers, with a projected growth rate of 30.8%, and clerical workers, with growth of 25.7%, follow. Craft workers are sixth with 23.9%, and laborers rank seventh with a 20.3% projected increase. Operatives/semiskilled workers are eighth at a projected growth rate of 13.5%, and farmers/farm workers follow with a 4.2% projection. When compared with the projected national growth rates, all of Virginia's occupational groups were above the comparable national growth rates. Some exceeded the national figure by significant percentages. Service workers in Virginia are the occupational group that most exceeds their projected national growth rate—23.7 percentage points higher than, or more than double, the national rate. This reflects the continued emergence and development of service-related industries within the Virginia economy, a trend that can be expected to continue beyond 1995.

The projected growth rate for clerical workers in Virginia also exceeds the national projected growth rate by a substantial amount, being expected to increase 16.2 percentage points faster than the national rate. The other occupational groups that have projected growth rates above those of the nation's by double-digit amounts are laborers (+13.0%); sales workers (+12.5%); professional and technical workers (+13.7%); and craft and kindred workers (+12.2%).

Clerical workers comprised the single largest occupational grouping in 1984, and will continue to do so in 1995. In terms of total employment, clerical workers will drop from being 20.3% of the total to 19.7%—a mere .5% decrease. Even so, this group's projected growth rate of 25.7% is below the state's projected total growth of 29%—a trend that is nationwide in scope. This drop can be attributed to the spread of computerized office equipment and other forms of automation.

Even though service jobs are projected to have the largest growth rate of any one occupational group, in terms of total jobs the service industry employment in 1995 is expected to remain the third largest occupational group—following clerical and professional/technical workers. However, service workers are expected to increase from 14.7% of the total in 1984 to 16.7% of all wage and salary employment in 1995.

Operative/semiskilled workers and farmers/farm workers have the lowest projected growth rates for all nine occupational groups. They are also the groups with

the least difference between the national projected growth rate and the projected Virginia growth rate. Both of these occupational groups' low projected growth rates reflect the continuation of long-term and far-reaching trends.

The occupations where high percentage and numerical increases are expected include a variety of high tech/highly skilled jobs as well as less skilled occupations. For example, an 88.3% rise, or 25,982 job increase, is projected for food preparation and service workers in fast food restaurants. Guards are expected to grow by 59.3%, or 9328 new jobs; and cashiers by 58.0%, or 24,706 jobs At the same time, electronic data processing systems analysts are predicted to increase by 73.1%, or 10,527 jobs; professional nurses by 59.8%, up 16,049 jobs; and electrical engineers by 57.6%, or 7,513 jobs.

Some occupations which had relatively few employees in 1984 but which are expected to experience high percentage growth rates include private detectives, rising by 97.2%; travel agents by 76.4%; employment interviewers (to fill all of these jobs!) by 74.1%; commercial artists by 60.6%; and biologists by 60.3%. There truly will be new jobs available for nearly every taste and attitude, ability or education, preference for temporary income versus a permanent career. Indeed, with some advance planning a person today could anticipate a very interesting career path across a wide variety of occupations in the coming years.CHG

To be continued in the August issue.

TABLE IV National and Virginia Occupational Projections, 1984-1995

	1984 Virginia Totals	1995 Virginia Totals	%Change Virginia 1984-1995	1984 National Totals	1995 National Totals	%Change National 1984-1995	% Difference National/Virginia (1984-1995
TOTAL OCCUPATIONAL EMPLOYMENT	2,343,498	3,023,205	29.0	106,843,000	122,760,000	14.9	14.1
THE NINE OCCUPATIONAL GROUPINGS							
Professional, Technical, & Kindred	430,431	582,681	35.4	16,011,000	19,697,000	23.0	12.4
Managers & Officials	211,922	277,233	30.8	11,274,000	13,762,000	22.1	8.7
Sales Workers	150,846	199,711	32.4	11,173,000	13,393,000	19.9	12.5
Clerical Workers	474,578	596,356	25.7	18,716,000	20,499,000	9.5	16.2
Crafts & Kindred Workers	276,109	342,062	23.9	12,176,000	13,601,000	11.7	12.2
Operatives & Semiskilled Workers	310,028	351,946	13.5	17,357,000	18,634,000	7.3	6.2
Service Workers	345,499	500,941	45.0	15,589,000	18,917,000	21.3	23.7
Laborers	137,236	165,139	20.3	17,357,000	18,634,000	7.3	13.0
Farmers	6,847	7,136	4.2	3,554,000	3,447,000	-3.0	7.2

Sources: Virginia Economic Commission
Monthly Labor Review, November 1985, "Occupational Employment Projections: The 1984-95 Outlook."

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VIRGINIA BUSINESS REPORT

BUREAU OF BUSINESS RESEARCH, SCHOOL OF BUSINESS ADMINISTRATION
THE COLLEGE OF WILLIAM AND MARY, WILLIAMSBURG, VIRGINIA

Report No. 346 August, 1989

Business in Virginia July, 1989

Each month our Bureau reports the percentage changes for nine economic indicators. Seven of these—our "early" indicators—show the changes for the preceding month, while two refer to the month before last.

For July, the statewide totals for six of the seven current economic indicators displayed a decrease compared to July 1988. The only gainer was electricity consumed, up 6.1%. The declining series were Bank Debits, off 13.5%; Building Permits, also down 13.5%; Newspaper Advertising Linage, -0.9%; New Car Registrations, continuing their slide with a decline of 10.3%; Water Consumed, falling 5.5%; and sales per store by our sample of retailers, dropping 2.6%.

In both May and June, five of the seven decreased, so we now have three consecutive months in which a majority of the seven early indicators have fallen. Furthermore, the recent declines have been strong enough to pull the cumulative year-to-date changes into the red for most series.

For March and April, four of the seven posted cumulative gains; in May the number was three; in June, it fell to two; and for July, only one, as shown in Table III. Thus the cumulative 1989 changes as well as the individual monthly changes for a majority of the seven early series have been negative for the past three months. That is conclusive evidence of a decrease in demand for a broad range of goods and services in Virginia. In that setting, lower increases in payroll employment are inevitable this fall, bringing in turn less real growth in household income.

Through June, one of our two lagged indicators displayed remarkable strength—nonagricultural employment, which stood 4.1% higher this June than last. Our other lagged indicator, Total Retail Sales measured by Department of Taxation receipts, jumped a surprising 13.7% in June. Remember though May sales were down 0.7%, so some late reporting probably produced at least part of the June jump. For January through June, Total Retail Sales increased 6.4%, about a half percentage point below expectations. We look for the same to somewhat lower retail sales growth for the second half of 1989. RLP

FUTURE JOBS FOR VIRGINIANS, PART II

Christine H. Grahl
Research Assistant

Perhaps the most obvious conclusion from Part I of this report on occupational projections for Virginia was that continued overall job growth for the state will be broadly dispersed among occupations. In addition, our relative prosperity became evident when Virginia

Chart I

Nine Selected Business & Economic Indicators Percentage Change

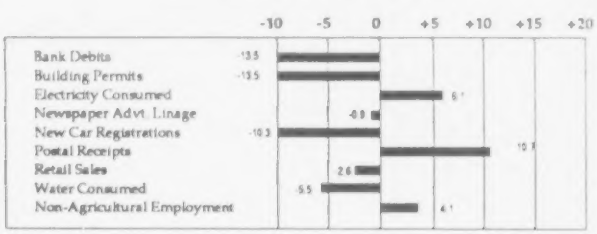
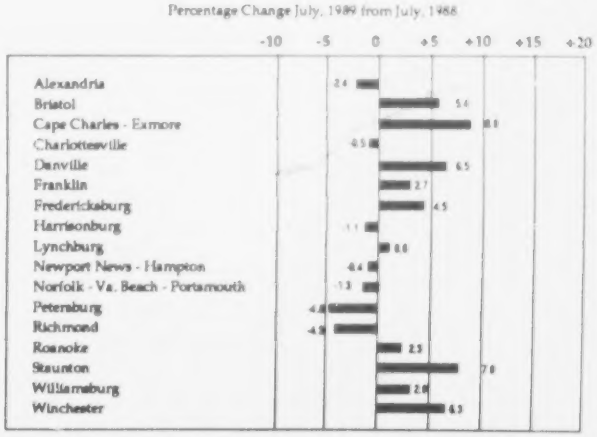


Chart II

City Indices



SELECTED BUSINESS AND ECONOMIC INDICATORS FOR 17 CITIES

TABLE I July, 1989

Monthly Index Number Comparisons of Current Month to Same Month in Base Period (1977) - Base Period = 100

CITY	CITY INDEX*	BANK DEBITS	BUILDING PERMITS	ELECTRICITY CONSUMED	NEWS-PAPER ADV. LINAGE	NEW CAR REGIS-TRATIONS	JUNE NON AGRI-CULTURAL EMPLOYMENT #	WATER CONSUMED	SAMPLE RETAIL SALES †	POSTAL RECEIPTS
The State		319.1	219.5	188.1	90.1	177.2	152.8	87.5	168.2	463.2
Alexandria	153.2	589.2	1326.9	221.1	N.A.	147.4	214.8	99.7	123.2	N.A.
Bristol	110.8	N.A.	57.5	103.4	67.3	107.9	120.8	110.2	124.3	300.6
Cape Charles - Exmore	189.8	N.A.	1311.0	183.0	N.A.	105.7	N.A.	N.A.	129.4	207.6
Charlottesville	197.0	131.2	285.5	165.5	N.A.	140.1	113.4	137.0	239.6	356.5
Danville	149.2	N.A.	530.4	137.2	N.A.	109.4	106.9	93.2	N.A.	260.5
Franklin	144.4	N.A.	118.1	149.5	103.3	131.2	N.A.	105.9	114.4	290.7
Fredericksburg	407.5	231.7	256.7	N.A.	N.A.	217.9	N.A.	107.3	226.3	1858.5
Harrisonburg	190.1	N.A.	273.6	N.A.	132.5	108.6	N.A.	152.3	153.2	314.1
Lynchburg	266.9	421.2	156.7	137.6	N.A.	106.4	102.4	130.5	189.4	1366.9
Newport News - Hampton	127.6	N.A.	225.4	163.5	99.8 ⊃	98.7	147.5 ⊃	N.A.	155.1	N.A.
Norfolk - Va. Beach - Portsmouth	182.8	235.4	193.1	206.5		122.2		97.8	211.5	N.A.
Petersburg	144.1	115.0	145.1	N.A.	N.A.	76.3	139.1 ⊃	121.0	122.2	279.7
Richmond	165.9	362.0	439.0	207.7	103.8	130.6		125.6	146.6	368.0
Roanoke	180.7	367.2	33.0	126.9	124.5	84.6	127.4	117.4	184.0	456.8
Staunton	161.8	141.6	287.9	N.A.	79.3	109.4	N.A.	N.A.	178.8	238.7
Williamsburg	194.0	197.2	200.5	229.7	N.A.	175.4	N.A.	134.5	134.9	428.2
Winchester	190.9	406.8	379.1	141.3	222.2	175.2	N.A.	N.A.	N.A.	N.A.

TABLE II July, 1989

Percentage Change from Same Month Last Year

CITY	CITY INDEX*	BANK DEBITS	BUILDING PERMITS	ELECTRICITY CONSUMED	NEWS-PAPER ADV. LINAGE	NEW CAR REGIS-TRATIONS	JUNE NON AGRI-CULTURAL EMPLOYMENT #	WATER CONSUMED	SAMPLE RETAIL SALES †	JUNE TOTAL RETAIL SALES ‡
The State		-13.5	-13.5	6.1	-0.9	-10.3	4.1	-5.5	2.6	-13.7
Alexandria	-2.4	9.8	91.9	4.2	N.A.	-16.5	6.3	-12.2	5.3	14.6
Bristol	1.0	N.A.	-39.3	5.5	11.1	-13.2	2.5	-20.2	0.9	20.1
Cape Charles - Exmore	8.9	N.A.	172.5	16.3	N.A.	3.2	N.A.	0.9	-0.4	43.0
Charlottesville	-0.5	-25.6	310.9	0.9	N.A.	1.0	2.3	-6.7	3.5	9.0
Danville	6.5	N.A.	329.3	7.8	N.A.	0.3	3.4	8.0	N.A.	13.0
Franklin	2.7	N.A.	-33.1	8.9	8.6	3.9	N.A.	-8.6	0.2	9.3
Fredericksburg	4.5	4.3	-75.1	N.A.	N.A.	-15.2	N.A.	6.9	5.5	19.0
Harrisonburg	-1.1	N.A.	-29.0	N.A.	1.2	-6.5	N.A.	-0.2	-3.9	9.5
Lynchburg	0.6	8.5	-17.9	3.0	N.A.	-11.7	3.4	-1.6	-1.8	17.0
Newport News - Hampton	-0.4	N.A.	16.6	7.9	0.1 ⊃	-11.0	1.0 ⊃	N.A.	-5.4	15.9
Norfolk - Va. Beach - Portsmouth	-1.3	-46.8	-48.4	9.1		-9.0		-2.2	-8.1	13.5
Petersburg	-4.8	37.0	-28.4	N.A.	N.A.	-16.8	3.3 ⊃	1.1	-11.7	14.2
Richmond	-4.3	-8.1	349.9	7.4	-3.5	-22.2		-11.7	7.6	10.4
Roanoke	2.3	0.4	-82.9	3.6	-5.7	-13.9	1.1	-8.3	-9.6	14.7
Staunton	7.9	-3.7	7.5	N.A.	-8.7	-4.4	N.A.	N.A.	-16.4	11.5
Williamsburg	2.9	17.7	-31.2	8.5	N.A.	-11.2	N.A.	1.1	0.9	19.2
Winchester	6.3	2.4	70.5	-1.8	5.5	8.0	N.A.	N.A.	N.A.	13.5

TABLE III

Percentage Change January - July from Same Period Last Year

CITY	CITY INDEX*	BANK DEBITS	BUILDING PERMITS	ELECTRICITY CONSUMED	NEWS-PAPER ADV. LINAGE	NEW CAR REGIS-TRATIONS	JAN. - JUNE NON AGRI-CULTURAL EMPLOYMENT #	WATER CONSUMED	SAMPLE RETAIL SALES †	JAN. - JUNE TOTAL RETAIL SALES ‡
The State		-10.6	-7.9	4.4	-1.9	-9.8	4.1	-0.1	-0.5	6.4
Alexandria	-2.3	8.4	15.9	4.8	N.A.	-7.4	5.1	-2.3	8.3	6.3
Bristol	0.6	N.A.	-11.1	1.9	1.9	-7.3	3.2	-13.5	3.2	10.0
Cape Charles - Exmore	-0.9	N.A.	51.5	7.4	N.A.	-15.3	N.A.	N.A.	3.4	12.8
Charlottesville	-1.0	-23.5	-33.2	4.6	N.A.	-31.2	0.7	4.7	3.1	4.3
Danville	1.5	N.A.	78.7	5.9	N.A.	-4.9	3.4	1.0	N.A.	1.9
Franklin	-0.1	N.A.	-49.6	4.9	-0.6	1.7	N.A.	-3.1	2.0	2.1
Fredericksburg	7.9	18.3	-32.7	N.A.	N.A.	-5.8	N.A.	14.8	10.2	7.7
Harrisonburg	2.5	N.A.	44.6	N.A.	-2.2	-9.5	N.A.	1.2	7.4	5.6
Lynchburg	0.2	6.4	40.9	3.0	N.A.	-14.9	1.9	5.5	0.2	5.1
Newport News - Hampton	-0.5	N.A.	-15.8	5.0	N.A. ⊃	-12.4	0.9 ⊃	N.A.	-1.8	9.1
Norfolk - Va. Beach - Portsmouth	-0.9	-27.4	-15.5	2.5		-5.1		N.A.	-3.2	4.9
Petersburg	-7.1	-25.6	-37.4	N.A.	N.A.	-26.8	2.6 ⊃	4.7	-13.9	11.5
Richmond	-2.0	-9.6	26.2	4.8	-2.3	-19.9		-2.6	-0.6	0.9
Roanoke	1.2	6.1	20.8	4.1	-3.8	-5.8	1.3	-1.2	4.1	4.0
Staunton	6.7	19.0	80.2	N.A.	-0.9	-12.1	N.A.	N.A.	14.2	10.4
Williamsburg	5.3	16.2	-43.9	16.7	N.A.	-2.4	N.A.	4.4	3.2	8.7
Winchester	3.6	6.6	81.0	3.6	4.3	-3.0	N.A.	N.A.	N.A.	9.5

* Computation of City Index is based upon a weighted arithmetic mean of all business and economic components listed except Building Permits and Bank Debits, which are excluded because of their highly erratic nature.
# Virginia Employment Commission data which lags behind current reports.
† Preliminary data based on a survey sample.
‡ Total sales based on sales tax information which lags behind current reports.
⊃ Only total MSA data are available for these areas.

N.A. – Not Available
0.0. – No Change

FUTURE JOBS FOR VIRGINIANS,CONT'D.

forecasts were compared with the projected national growth rates for major occupational groups. Most of the state's MSAs show projected occupational growth rates above the national average as well. Not surprisingly, certain occupational groups such as service workers and certain specific occupations, particularly in computer-related fields, lead the field in terms of projected growth rates. However Virginia's growth is not dependent upon just these groups.

As indicated in the previous article, the occupational statistics analyzed here were derived by the Virginia Employment Commission using projection techniques developed by the Department of Labor. A more detailed explanation can be found in the Virginia Employment Commission's publication, Virginia's Occupational Employment Projections 1990.

In this half of the report, the focus will be the Northern Virginia MSA as compared with the rest of the state. To many Virginians, Northern Virginia appears to be an entity unto itself. While for many this assumption is based as much on Beltway rush hour traffic as any other single observation, most probably feel the uniqueness applies to the subject of occupational projections as well.

As defined by the state, the Northern Virginia MSA includes the cities of Alexandria, Fairfax, Falls Church, Manassas and Manassas Park. It also includes the counties of Arlington, Fairfax, Loudoun, Prince William, and Stafford. This area, in close proximity to the District of Columbia, has experienced an economic boom since the early 1970's that draws much of its strength from Federal contracts and jobs. The D.C. proximity also creates a different labor base and occupational range than found in most of the rest of the MSAs in the Commonwealth.

Northern Virginia is predicted to continue leading the state in terms of the overall rate of job growth, up 34.9% cumulatively for the period 1984-1995. When compared with the Commonwealth's projected growth rates for the same period, this area will continue to experience above-average growth rates in every occupational group except for that of service workers. Richmond, with a projected wage and salary employment growth of 30.8%, is the only other MSA above the state's predicted total of 29.0%. Charlottesville (with a projected growth of 28.3%); Roanoke (with a rise of 25.9%); Norfolk (with an increase of 23.4%), Lynchburg (with a gain of 20.7%) and Danville (up 2.2%) all are projected to grow more slowly than the State's overall job growth rate.

Because Northern Virginia contains a high proportion of the state's workers in certain occupational groups, and because of its high projected growth rates for all nine occupational groups, it may be expected to have an obvious impact on the projected percent changes for those groups in the state as a whole. Conversely, when the Northern Virginia MSA is excluded from the data analysis some important changes might be expected. However, the change in overall growth rates is not as large as most would probably expect—when Northern Virginia is excluded the total growth rate for the remainder of Virginia drops only two percentage points from 29.0% to 27.0%.

The differences are substantially larger for some of the occupational groups. For professional workers, where Northern Virginia already has an above-average share, omitting Northern Virginia's predicted jump of 41.3% lowers the residual growth rate for the rest of Virginia by three percentage points to 32.4%. However, most of the specific occupational groups whose growth rates are significantly lower when Northern Virginia is excluded are not the same occupational groups that are concentrated in that region. The occupational groups most affected are the craft workers, whose growth rate drops 3.1 percentage points to 20.8%; laborers, whose growth rate also falls 3.1 percentage points, to 17.3%; and farmers/farm workers, where the rate swings from plus 4.2% to a slightly negative -.9%. Service workers are the only occupational group predicted to have a substantially higher growth rate when Northern Virginia is excluded—the service growth rises to 48.1%. Chart II on page 4 shows the Virginia growth rates with and without the Northern Virginia MSA.

Perhaps what is even more surprising when the Northern Virginia MSA is not included in the analysis is the fact that the growth rates for some occupational groups remain virtually the same. Despite the fact that 31% of the State's managerial workers are located in the Northern Virginia MSA, when that MSA is excluded from analysis the projected growth rate of the managerial occupational group only drops by 1.1%. When the projected growth rates for sales workers and clerical workers are analyzed without the Northern Virginia MSA, they only drop by 1.1% and 1.5%, respectively. These small changes reflect the expectation that the demand gains for these occupations will be relatively evenly dispersed across the Commonwealth.

Statewide the two categories that contain the largest proportion of persons with post-secondary or college education are expected to increase at rates faster than the projected gain for total Virginia employment. Professional/technical workers and managerial workers, with growth rates of 35.4% and 30.8%, will also experience increases exceeding the national growth rates for these occupational groups. When combined, these two categories by 1995 will account for 28.4% of total employment (859,914 positions) in Virginia, up from 27.4% (642,353 positions) in 1984.

In the Northern Virginia MSA where there already is a significant concentration of these types of jobs, the increases are expected to be 41.3% and 33.3%, respectively. That means from 1984 through 1995, 39% of Virginia's projected growth for professional/technical workers, and 33% for managerial workers, will be in the

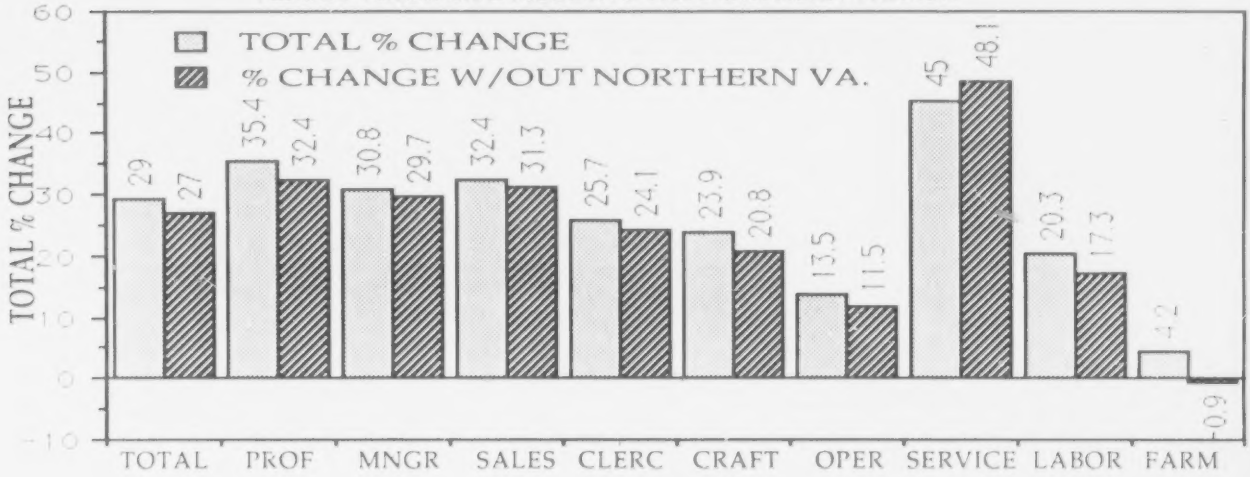
Northern Virginia MSA.

The two occupational groups that lead in all but two of the MSAs in terms of projected growth rates are the sales workers and the service workers. In the Danville MSA, they follow only the professional workers occupational group in terms of projected percentage increase. It is only in the Northern Virginia MSA that sales workers are not one of the top three occupational groups in terms of projected growth (ties for fourth in that MSA).

In sum, the 1984-1995 occupational employment projections for Virginia uphold the commonly-held perception of the Commonwealth as a state that is both growing and developing. The projected growth rates for Northern Virginia indicate the continued importance of that MSA in Virginia's expansion. However, the Virginia growth rates excluding Northern Virginia are predicted to be quite close to the all-inclusive rates, in total and for most occupational groups.

Furthermore, the trends toward a more computerized and service-oriented economy that are being observed all over the nation are also apparent in Virginia. But these changes are not unanticipated, and from all indications Virginians will adapt to them, just as we have done in the past. CHG

CHART III PROJECTED % CHANGES 1984-1995 FOR VIRGINIA AS A WHOLE VERSUS VIRGINIA EXCLUDING THE NORTHERN VA. MSA



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VIRGINIA BUSINESS REPORT

BUREAU OF BUSINESS RESEARCH, SCHOOL OF BUSINESS ADMINISTRATION
THE COLLEGE OF WILLIAM AND MARY, WILLIAMSBURG, VIRGINIA

Report No. 347 September, 1989

Business in Virginia August, 1989

We apologize for the delay in the Report this month. Some data we felt were worth waiting for were not available until after our usual cutoff date, and in a choice between accuracy and timeliness we chose accuracy.

Our regular readers will notice a difference in Chart I and Tables II and III. Our monthly commentary frequently focuses on the seven "early" indicators for the past month. To more clearly highlight that set of indicators, only those seven henceforth will be shown in Chart I. In addition, Tables II and III have been rearranged to place those seven indicators together, followed by the two lagged series, Nonagricultural Employment and Total Retail Sales as reported to the Virginia Department of Taxation.

The early indicators for August depict a month of slower economic activity compared to August of 1989. Five of the seven declined statewide, with a sixth, bank debits, up only an insignificant 0.3%.

The single clear gain was by building permits, jumping 15.9%. That highly volatile series, however, declined in May, June, and July, so a rebound in August is not startling. It also should not be viewed as very encouraging for the construction industry — for the first eight months of 1989, as shown in Table III, our statewide sample of localities has experienced a decline of 4.8% in the dollar value of new building permits. As we have warned repeatedly, the building boom in Virginia temporarily is coming to a halt. That already is quite evident in the Hampton Roads metropolitan area, on both sides of the James River, and it will be apparent very soon in other areas of the Commonwealth.

New car registrations in Virginia continued their downward trend in August, falling 5.4 % from the same month last year. That went counter to an August surge nationwide, spurred by incentives and anticipation of higher prices for the 1990 models. Virginians could have bought — our per capita income growth still ranks in the top ten among the 50 states — but are choosing not to do so. For the year to date, new car sales are down 9.1% across the state. High rates of purchase in recent years have provided Virginians with a large stock of current models that they do not wish to replace now or in the near future. Our assessment is Virginia new car sales will be no stronger in 1990 than in 1989.

Our sample of retailers realized a 1.5% drop in August sales per store, leaving the cumulative January-August decline at 0.7%. This year definitely has shown less growth in retail demand than expected. The total taxable retail sales as reported to the Virginia Department of Taxation indicate an increase statewide of 5.3% for January through August, well below our November 1988 prediction of a 1989 rise of 7.1%. That prediction now seems unattainable since the outlook for the fall and Christmas periods is only modest gains compared to last year. You may recall that in 1989 Virginia retailers experienced a spectacular surge in retail sales at Christmastime. Today's economic environment, while still very satisfying, is highly unlikely to stimulate a similar carefree splurge this year.

The two lagged series we examine are total retail sales and payroll employment. In July total retail sales fell a marginal 0.1% compared to July 1988, following a reported 13.7% rise in June. The combined result for June and July, discussed more extensively in our second article ths month, was a 6.3% advance statewide. Not bad, but below the 6.7% growth nation-

Chart I

Seven Selected Business & Economic Indicators Percentage Change

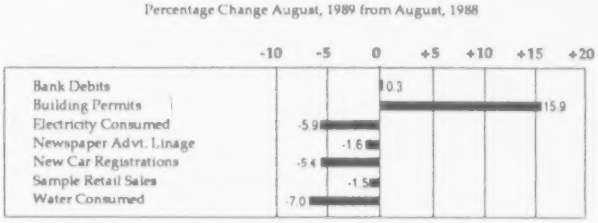
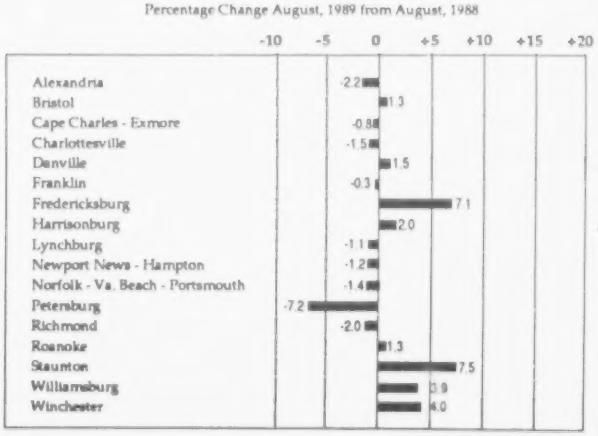


Chart II

City Indices



SELECTED BUSINESS AND ECONOMIC INDICATORS FOR 17 CITIES

TABLE I August, 1989 — Monthly Index Number Comparisons of Current Month to Same Month in Base Period (1977) - Base Period = 100

CITY	CITY INDEX*	BANK DEBITS	BUILDING PERMITS	ELECTRICITY CONSUMED	NEWS-PAPER ADV. LINAGE	NEW CAR REGIS-TRATIONS	WATER CONSUMED	SAMPLE RETAIL SALES †	SEPTEMBER NON-AGRI-CULTURAL EMPLOYMENT #	POSTAL RECEIPTS
The State		216.3	257.3	183.0	101.9	188.5	86.7	148.8	152.0	488.7
Alexandria	161.7	551.8	1436.0	213.0	N.A.	121.3	120.8	151.2	215.5	330.9
Bristol	139.0	N.A.	168.0	109.7	74.7	112.2	104.1	130.1	119.0	234.2
Cape Charles - Exmore	117.2	N.A.	290.7	169.0	N.A.	95.1	N.A.	100.8	N.A.	332.9
Charlottesville	194.6	159.5	228.5	162.0	N.A.	112.5	134.7	228.0	111.7	234.0
Danville	136.0	N.A.	266.0	133.6	N.A.	87.4	91.0	N.A.	105.4	262.0
Franklin	152.7	N.A.	114.5	140.1	127.8	111.5	105.7	158.1	N.A.	1747.6
Fredericksburg	465.2	273.1	483.7	N.A.	169.0	214.3	103.0	286.2	N.A.	336.3
Harrisonburg	173.0	362.6	1053.3	N.A.	165.5	86.0	158.8	158.4	N.A.	1627.0
Lynchburg	273.7	473.2	1056.8	138.6	N.A.	80.5	116.8	175.6	100.8	N.A.
Newport News - Hampton	143.4	N.A.	207.2	162.0	99.8	82.3	N.A.	186.1	145.8	N.A.
Norfolk - Va. Beach - Portsmouth	154.2	113.2	235.1	199.2		93.1	96.1	203.7		281.4
Petersburg	116.0	110.4	101.9	N.A.	N.A.	67.4	127.1	106.9	138.6	384.6
Richmond	152.1	203.7	196.6	198.9	119.1	90.6	120.0	111.8		436.7
Roanoke	169.2	403.3	92.0	131.1	137.0	68.9	124.0	173.3	126.5	228.4
Staunton	169.8	158.5	261.7	N.A.	90.7	96.0	N.A.	196.7	N.A.	422.0
Williamsburg	187.8	239.3	311.4	216.5	N.A.	159.3	131.2	153.4	N.A.	N.A.
Winchester	191.5	424.0	417.3	152.6	273.7	136.7	N.A.	N.A.	N.A.	120.8

TABLE II August, 1989 — Percentage Change from Same Month Last Year.

CITY	CITY INDEX*	BANK DEBITS	BUILDING PERMITS	ELECTRICITY CONSUMED	NEWS-PAPER ADV. LINAGE	NEW CAR REGIS-TRATIONS	WATER CONSUMED	SAMPLE RETAIL SALES †	JULY NON-AGRI-CULTURAL EMPLOYMENT #	JULY TOTAL RETAIL SALES ‡
The State		0.3	15.9	-5.9	-1.6	-5.4	-7.0	-1.5	3.9	-0.1
Alexandria	-1.5	2.1	463.6	-7.7	N.A.	-3.3	-2.3	-2.3	6.6	1.6
Bristol	3.7	N.A.	127.7	0.2	16.9	27.0	-29.0	3.0	3.2	6.0
Cape Charles - Exmore	-5.3	N.A.	-58.9	-4.1	N.A.	4.5	-41.7	0.3	N.A.	3.2
Charlottesville	-4.1	-17.1	-56.0	-7.2	N.A.	-12.1	-11.7	-4.1	1.9	8.4
Danville	1.3	N.A.	94.7	0.3	N.A.	-7.8	1.2	N.A.	3.4	9.5
Franklin	0.6	N.A.	171.3	-14.8	-0.3	30.8	-1.5	1.7	N.A.	-14.3
Fredericksburg	7.2	-3.1	-4.0	N.A.	2.6	-2.4	-4.6	17.5	N.A.	2.2
Harrisonburg	-1.2	18.2	-18.6	N.A.	-2.6	-10.1	-7.2	1.1	N.A.	8.0
Lynchburg	-7.8	14.4	884.1	-5.5	N.A.	-5.0	-19.1	-13.0	2.5	3.4
Newport News - Hampton	-4.8	N.A.	-48.6	-2.4	-2.8	-19.2	N.A.	-2.0	0.1	-8.4
Norfolk - Va. Beach - Portsmouth	-3.8	-5.6	-14.7	-7.7		-7.8	-3.6	-2.5		-5.3
Petersburg	-7.8	-4.7	-55.8	N.A.	N.A.	-14.2	0.5	-17.1	2.7	7.6
Richmond	-7.0	39.0	-23.1	-5.5	-0.3	-30.8	-13.5	-8.5		-4.4
Roanoke	2.5	5.5	60.2	-0.8	-9.0	1.7	2.4	9.1	1.1	0.2
Staunton	13.0	-4.9	19.7	N.A.	2.7	16.3	N.A.	14.6	N.A.	15.4
Williamsburg	-1.8	31.6	-18.8	-6.0	N.A.	-5.1	-0.2	3.5	N.A.	-11.7
Winchester	-0.9	-2.9	231.2	0.8	7.2	-20.9	N.A.	N.A.	N.A.	10.3

TABLE III — Percentage Change January - August from Same Period Last Year.

CITY	CITY INDEX*	BANK DEBITS	BUILDING PERMITS	ELECTRICITY CONSUMED	NEWS-PAPER ADV. LINAGE	NEW CAR REGIS-TRATIONS	WATER CONSUMED	SAMPLE RETAIL SALES †	JAN. - JULY NON-AGRI-CULTURAL EMPLOYMENT #	JAN. - JULY TOTAL RETAIL SALES ‡
The State		-9.8	-4.8	2.9	-1.9	-9.1	-1.1	-0.7	4.2	5.3
Alexandria	-2.2	7.5	37.5	2.9	N.A.	-6.9	-2.3	-7.5	5.4	5.5
Bristol	1.3	N.A.	3.9	1.7	7.2	-3.6	-15.9	3.2	3.2	9.3
Cape Charles - Exmore	-0.8	N.A.	32.4	5.7	N.A.	-13.1	N.A.	-3.0	N.A.	10.8
Charlottesville	-1.5	-22.6	-36.2	2.9	N.A.	-29.3	2.3	2.1	0.9	4.9
Danville	1.5	N.A.	80.1	5.1	N.A.	-5.2	1.1	N.A.	3.5	3.0
Franklin	-0.3	N.A.	-44.3	1.9	-0.5	4.7	-2.9	-1.5	N.A.	-0.8
Fredericksburg	7.1	15.0	-27.6	N.A.	2.7	-5.3	11.7	11.2	N.A.	6.8
Harrisonburg	2.0	33.6	30.8	N.A.	-2.3	-9.6	0.0	6.6	N.A.	6.0
Lynchburg	-1.1	7.5	112.5	1.8	N.A.	-13.9	1.7	-1.7	2.0	4.9
Newport News - Hampton	-1.2	N.A.	-21.1	3.9	N.A.	-13.4	N.A.	-1.8	0.8	5.9
Norfolk - Va. Beach - Portsmouth	-1.4	-26.5	-15.4	1.0		-5.4	N.A.	-3.1		3.1
Petersburg	-7.2	-23.5	-40.1	N.A.	N.A.	-25.3	4.1	-14.3	2.6	11.2
Richmond	-2.0	-6.4	17.6	3.3	-2.1	-21.2	-4.3	-1.6		0.0
Roanoke	1.3	6.0	23.5	3.4	-4.5	-5.0	-0.7	4.7	1.3	3.4
Staunton	7.5	15.5	69.0	N.A.	-0.4	-9.0	N.A.	14.3	N.A.	11.2
Williamsburg	3.9	18.3	-41.8	13.0	N.A.	-2.7	3.7	3.2	N.A.	3.9
Winchester	4.0	N.A.	96.5	3.2	4.8	-5.7	N.A.	N.A.	N.A.	9.6

* Computation of City Index is based upon a weighted arithmetic mean of all business and economic components listed except Building Permits and Bank Debits, which are excluded because of their highly erratic nature.
# Virginia Employment Commission data which lags behind current reports.
† Preliminary data based on a survey sample.
‡ Total sales based on sales tax information which lags behind current reports.
⊃ Only total MSA data are available for these areas.

N.A. – Not Available
0.0. – No Change

ally for a comparable measure, total retail sales excluding the automobile group, as well as below most Virginia forecasts including ours.

On the other hand, payroll job growth through July averaged 3.9% for the year to date, a strong performance and above our November 1988 prediction of a 3.2% increase during 1989. Such high job growth is encouraging. However, remember that employment is a coincident indicator, one that generally does not slow down until the economy already is shifting into a lower gear. Employers will not continue to hire at current rates as most other Virginia economic measures are decelerating — job growth will slow markedly very soon.

The above comments may sound depressing, with the many references to either slowing growth or falling levels. However, even with a significant slowdown in our overall growth, national forecasters as well as our Bureau are predicting, with good reason, that Virginia will continue to experience income and job growth above the national average in 1990. RLP

June-July Retail Sales Growth Across Virginia

The general sales tax receipts for June soared, showing a 13.7% increase in total retail sales for the state compared to June of 1988. Now we find that for July the statewide year-to-year change was a decline of 0.1%, as reported in Table II.

Neither monthly outcome is a reliable indicator of summer retail sales in Virginia. Therefore we totaled the June and July sales for 1988 and for 1989 and then calculated the growth rates, to offer a clearer perspective on recent retail buying around the state. The June and July total sales for 1989 and the growth rates from the same two months in 1988 are given in Table IV in rank order for the Commonwealth and 31 regional areas within it. The areas for which the names are shown in ALL CAPITAL letters are the seventeen we regularly cover, as listed in Tables I-III.

In Table IV we have added the remaining thirteen Labor Market Areas (LMAs) as defined by the Virginia Employment Commission—see any issue of their monthly Labor Market Review for a complete listing of the cities and counties included in each of Virginia's eight Metropolitan Statistical Areas (MSAs) and its twenty LMAs. We have 31 areas instead of the 28 defined by the VEC because we divide the Richmond-Petersburg MSA into two portions, a Richmond Area and a Petersburg Area; and we separate the Norfolk-Virginia Beach-Newport News MSA into three parts: the Norfolk-Virginia Beach-Portsmouth Area (with Chesapeake and Suffolk), the Newport News-Hampton Area (also including Gloucester County, Poquoson, and York County), and the Williamsburg Area consisting of Williamsburg and James City County. Our 31 areas (and the VEC's 28) encompass all of Virginia's cities and counties, giving a complete record of the state's performance by region.

Along with total retail sales we included a second indicator in Table IV—the civilian labor force in each area during July 1989 and the percentage change since July 1988. Population figures by area for 1989 are not available, so we turned to the civilian labor force measure as an alternative for offering some insights into resident growth in the areas.

The civilian labor force estimate is based on a monthly household survey and shows the number of residents over 16 who are employed or actively seeking work. Thus an area's labor force can rise for two reasons: a new resident with, or seeking, a job moves to the area; or, an existing resident not previously in the labor force, such as a student or a spouse, decides to get a job outside of the home. Accordingly, changes in the labor force depend on individual choices and are not just a headcount of the adult population; and a rising participation rate, the percent of the population choosing to be in the labor force, has been a major source for filling new jobs. Our own rough estimate is about 70% of Virginia's jobs created since 1982 have been filled by residents here prior to 1982, while only 30% have been taken by people moving or commuting to Virginia. The point is that the labor force and employment can rise (or fall) faster than total population because of changes in the participation rate. However, an area's resident labor force and its population generally can be expected to move in the same direction. In any case, the civilian labor force in an area and its growth rate should be a significant indicator of the local resident retail customer base. This rather lengthy background is appropriate because the actual data reported in Table IV do not reveal any significant link at the local level between retail sales growth and the percentage change in an area's civilian labor force.

As shown in the lower portion of Table IV, retail sales in Virginia for June and July 1989 totaled slightly more than $8 billion. That was a 6.3% gain from the same months in 1988, marginally below the 6.7% rise for a comparable national retail measure, as noted on the front page. With the prices of retail merchandise rising at about a 4% rate, the Virginia retail growth for the June and July period was a little over 2%. That coincides with a 2.0% increase in the state's civilian labor force from July 1988 to July 1989 — not much real change in purchases per member of the labor force.

Turning to the local areas, one can see that the 17 we regularly cover are well dispersed throughout the list, showing they do indeed give a reasonably representative view of the differences in economic activity across the Commonwealth.

The full list quite dramatically displays the wide range of retail growth rates across the state for June and July—from the 26.2% for the Norton LMA to a decrease of 6.7% further north in the Bath-Highland LMA, a spread of almost 33 percentage points.

There were 13 areas with double-digit increases, all of which are either small urban or more rural areas. You have to move below the double-digit range, to Lynchburg's 9.9% increase, before reaching a metropolitan area with more than 70,00 persons in its labor force. Note also that the 13 top areas in retail sales percentage gains generally had little or no growth in the labor force. Only the Danville MSA and the Petersburg Area, with labor force advances of 2.8% and 3.3% respectively, achieved significant increases.

Only three of the areas experienced actual declines in dollar sales for this part of the summer. However, there were eight areas with growth rates below 4%, the retail inflation rate, implying the real volume of goods sold declined in these areas. The portion of Virginia from Richmond eastward includes six of those eight areas. Notably, the major region of the state with no real growth in retail sales for June and July combined was all three segments of the Norfolk-Virginia Beach-Newport News MSA.

One final observation regarding the civilian labor force. The statewide increase of 2% July to July was a net addition of 63,401 persons. The Northern Virginia growth of 5.2% represents a gain of 47,622 people in the resident labor force there. Thus from July to July, the growth in the labor force residing in Northern Virginia accounted for 75.1%, three out of four, of the net additions to Virginia's labor force. RLP

TABLE IV

JUNE-JULY RETAIL SALES BY VIRGINIA REGIONS

	TOTAL RETAIL SALES		CIVILIAN LABOR FORCE	
	JUNE & JULY 1989	1988-1989 JUNE & JULY % CHANGE	JULY 1989	1988-1989 % CHANGE
Norton LMA	$63,602,324	26.2%	24,581	-3.4%
EASTERN SHORE LMA	$54,550,137	19.9%	19,407	0.2%
STAUNTON-WAYNESBORO LMA	$112,301,491	13.5%	45,430	-6.1%
Covington LMA	$25,106,243	12.9%	10,652	-5.8%
Martinsville LMA	$86,471,310	12.7%	50,826	-2.3%
BRISTOL VA. AREA	$96,297,447	12.3%	44,252	0.7%
WINCHESTER LMA	$120,001,076	11.9%	33,898	0.4%
Buena Vista LMA	29,567,727	11.6%	13,485	-1.8%
DANVILLE MSA	$99,361,148	11.3%	54,146	2.8%
PETERSBURG AREA	$130,759,622	10.7%	59,071	3.3%
Galax LMA	$37,452,350	10.6%	24,483	-0.8%
Essex-Richmond LMA	$26,882,664	10.5%	8,373	0.7%
FREDERICKSBURG LMA	$141,464,546	10.2%	34,199	1.8%
LYNCHBURG MSA	$182,293,192	9.9%	72,254	1.7%
Radford LMA	$130,242,028	9.8%	72,189	1.1%
Emporia LMA	$16,162,002	9.7%	7,188	0.3%
HARRISONBURG LMA	$117,180,271	8.7%	46,231	-5.2%
CHARLOTTESVILLE MSA	$175,970,115	8.7%	67,206	0.5%
ALEXANDRIA (NORTHERN VA. MSA)	$2,510,085,516	7.8%	963,870	5.2%
ROANOKE MSA	$364,994,362	6.8%	125,374	1.1%
Lancaster-Northumberland LMA	$21,747,688	6.5%	9,083	0.5%
STATE TOTAL	$8,006,379,721	6.3%	3,215,949	2.0%
Bedford LMA	$27,742,939	4.8%	13,485	-1.8%
Cumberland-Prince Edward LMA	$23,524,778	4.7%	9,821	-2.5%
NORFOLK-VA.BEACH-PORTSMOUTH AREA	$1,128,685,751	3.1%	426,648	0.5%
RICHMOND AREA	$1,131,181,680	2.6%	485,719	0.9%
South Boston LMA	$26,818,450	2.5%	17,078	1.5%
NEWPORT NEWS/HAMPTON AREA	$419,326,199	2.2%	183,090	0.2%
WILLIAMSBURG AREA	$126,748,080	0.7%	21,748	0.0%
King & Queen-King William LMA	$9,579,919	-0.3%	7,655	-2.8%
FRANKLIN LMA	$35,143,566	-3.9%	20,530	2.6%
Bath-Highland LMA	$11,115,344	-6.7%	2,700	-4.7%

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